THE STANDARD BOOK.

SCRIBNER'S
Lumber and Log
BOOK.

Nearly a Million Copies have been Sold.

New, Revised and Enlarged Edition.

CURTIS & CO.,
811 & 813 North 2d Street,
St. Louis, Mo.
—AND—
40 Franklin St., Chicago, Ill.

Sent, post-paid, to any address, for 35 cts.

SCRIBNER'S

LUMBER & LOG BOOK;

FOR SHIP BUILDERS, BOAT BUILDERS,
LUMBER MERCHANTS, FARMERS,
AND MECHANICS.

BEING A CORRECT MEASUREMENT OF
SCANTLING, BOARDS, PLANK, CUBICAL CONTENTS OF
SQUARE AND ROUND TIMBER,
SAW-LOGS, BY DOYLE'S RULE;
STAVE AND HEADING BOLTS, WOOD, TABLES OF WAGES
BY THE MONTH, BOARD OR RENT, BY THE WEEK,
OR DAY, CAPACITY OF CISTERNS,
INTEREST TABLES, &C.

BY J. M. SCRIBNER, A. M.
AUTHOR OF "'ENGINEERS' & MECHANICS' COMPANION,"
"ENGINEERS' TABLE BOOK, &C."

REVISED, ENLARGED, AND IMPROVED,
BY DANIEL MARSH,
CIVIL ENGINEER.

ROCHESTER, N. Y.:
PUBLISHED BY GEO. W. FISHER
1880.

Entered according to act of Congress, A. D.
MDCCCLXXII,
BY GEO. W. FISHER,
In the office of the Librarian of Congress,
at Washington, D. C.

NOTE.—I have for several years owned the copyright and stereotype plates of Doyle's Ready-Reckoner, a similar book to Scribner's, but have discontinued its publication.

Any infrigement of the copyright of either Scribner's or Doyle's book will be prosecuted to the full extent of the law.

Rochester, N. Y., 1872.

PREFACE

TO THE NEW EDITION OF 1872.

The very large, and almost unprecedented sale of former editions of this useful book, has induced the publisher to prepare a revised, and enlarged edition, containing 24 pages of new tables, and other useful matter pertaining to lumber and logs. Many of the old tables have been extended so as to give the measurement of timber of smaller sizes. The Cord Wood Table, and the Table of Wages have been extended. *An entirely New Table* for Stave and Heading Bolts has been introduced, giving the price per foot, at so much per cord. Tables giving the specific gravity of different woods, the capacity of Cisterns, and other minor tables have been added, and also, **DOYLE'S RULE for MEASURING SAW LOGS**, has been substituted for Scribner's, and the whole book ha sbeen carefully examined by DANIEL MARSH, A PRACTICAL CIVIL ENGINEER, and the calculations can be relied upon as mathematically correct. No pains or expense have been spared in revising and enlarging this edition, to make it in every respect venient and accurate.

A few recommendations of its value from former editions are inserted, but best advertisement for the book is the fact that it been constantly growing in public favor until the sa amount to nearly *half a million copies*, and it is now ecognised by lumber dealers generally as the STANDA LUMBER AND LOG BOOK throughout the United Sta s.

THE PUBLISHER.

Rochester, N. Y., January, 1872.

CONTENTS.

Page.
Preface, ... 3
Recommendations, ... 5
Hints to Lumber Dealers, ... 6
Felling Timber 7
Seasoning and Preserving Timber, ... 8
TABLE I. Scantling Measure, ... 9
" II. Board Measure, ... 22
" III. Plank Measure, ... 26
" IV. Square Timber, ... 40
" V. Round Timber reduced to square, ... 51
" VI. Cubical Contents of Spars, ... 56
" VII. Logs reduced to Inch-board measure, 61
" VIII. Table of Standard Logs, ... 68
" Table of Specific Gravity of Woods,. 69
" Table for Capacity of Cisterns,. ... 69
" IX. Wood Measurer, ... 70
" X. Price of Wood per cord, ... 71
" XI. Table of Wages per month, ... 74
" Table of Wages per week, ... 80
" Table of Wages per day, ... 80
" XII. Table of Board or Rent, per week of six days, ... 81
" XIII. Table of Board or Rent, per week of seven days, ... 82
" XIV. Stave and Heading Bolts, ... 83
Strength of Ice, ... 88
Staves, &c., compared with Barrels, 88
Fuel and Charcoal, ... 88
Brief Remarks, ... 89
Table of Daily Savings at compound Interest, ... 89
Short Rules for casting Interest, ... 90
" XV. Interest Tables at 6 per cent. 91

RECOMMENDATIONS.

We have carefully examined "The Ready Reckoner," by J. M. Scribner, A. M., and we take pleasure in recommending it to the confidence and patronage of those interested in such books, as one of the most convenient, extensive, and correct Table books within our knowledge.

These Tables are sufficiently numerous and extensive, and, what is of the greatest importance, they may be *safely relied upon for the correctness of the results given by both buyer and seller of Lumber of any kind.*

SYLVESTER BROWN, Rochester, N. Y. Jan., 1846.
L. A. BURROWS, Buffalo, N. Y. " "
Sawyers and Lumber Dealers.

Buffalo, N. Y., March 30th, 1864.

Geo. W. Fisher, Esq.,
Rochester, N. Y.

Dear Sir:

We have used J. M. Scribner's Ready Reckoner and Log Book "for measuring square Timber, &c.," for the past 10 years in our Hemlock Lumber business, and we find it complete and perfectly correct in all respects, and would recommend its use to all persons engaged in the lumber business.

GEO. W. SMITH & SON,
Lumber Dealers.

Geo. W. Fisher,

Dear Sir:—We have used Mr. Doyle's calculations for measuring logs for many years, and consider them the most reliable now in use, and in fact the only tables that give fair measurment for buyer and seller of Logs.

G. W. & C. T. CROUCH,
Manufacturers and Dealers in all kinds of LUMBER, LATH and SHINGLES.

Rochester, Feb., 1872.

Hints to Lumber Dealers and Mechanics in selecting Materials for Building Purposes.

SELECTION OF STANDING TREES.

The principal circumstances which effect the quality of growing trees, are *soil*, *climate*, and *aspect*.

In a moist soil, the wood is less firm, and decays sooner than in a dry, sandy soil; but in the latter, the timber is seldom fine; the best is that which grows in a dark soil, mixed with stones and gravel. This remark does not apply to the poplar, willow, cypress, and other light woods, which grow best in wet situations.

In the United States, the climate of the Northern and Middle States is most favorable to the growth of timber used for ordnance purposes, except the cypress.

Trees growing in the centre of a forest, or on a plain, are generally straighter and more free from limbs than those growing on the edge of the forest, in open ground, or on the sides of hills; but the former are at the same time less hard. The aspect most sheltered from the prevalent winds is generally most favorably to the growth of timber. The vicinity of salt water is favorable to the strength and hardness of white oak.

The selection of timber trees should be made before the fall of the leaf. A healthy tree is indicated by the top of branches being vigorous, and well covered with leaves; the bark is clear, smooth, and of a uniform color. If the top has a regular, rounded form—if the bark is dull, scabby, and covered with white and red spots, caused by running water or sap—the tree is unsound. The decay of the uppermost branches, and the separation of the bark from the wood, are infallible signs of the decline of a tree.

DEFECTS OF TIMBER TREES, (ESPECIALLY OF OAK.)

SAP, the white wood next to the bark, which very soon rots, should never be used, except that of hickory. There are sometimes found rings of light-colored wood surrounded by good hard wood; this may be called the *second sap*; it should cause the rejection of the tree.

BRASH-WOOD, is a defect generally consequent on the decline of the tree from age; the pores of the wood are open, the wood is reddish colored, it breaks short, without splinters, and the chips crumble to pieces. This wood is entirely unfit for mechanical purposes or artillery carriages.

WOOD WHICH HAS DIED BEFORE BEING FELLED, should in general be rejected; so should *knotty trees*, and those which are covered with tubercles, &c.

TWISTED WOOD, the grain of which ascends in a spiral form, is unfit for use in large scantling; but if the defect is not very decided, the wood may be used for naves, and for some light pieces.

SPLITS, CHECKS, and CRACKS, extending toward the centre, if deep and strongly marked, make the wood unfit for use, unless it is intended to be split.

WIND-SHAKES, are cracks separating the concentric layers of wood from each other; if the shake extends through the entire circle, it is a ruinous defect.

All the above mentioned defects are to be guarded against in procuring timber for use in artillery constructions; the *centre heart* is also to be rejected in nearly all cases.

FELLING TIMBER.

The most suitable season for felling timber, is that in which vegetation is at rest, which is the case in mid-winter and in mid-summer; recent opinions, derived from facts, incline to give preference to the latter season, say the month of July; but the usual practice is to fell trees for timber between the first of December and middle of March. Some experiments are in progress with a view to determine the question with regard to oak timber for ordnance purposes.

The tree should be allowed to obtain its full maturity before being felled; this period in oak timber is generally at the age of from 75 to 100 years, or upwards, according to circumstances. The age of hard wood is determined by the number of rings which may be counted in a section of the tree.

The tree should be cut as near the ground as possible, the lower part being the best timber. The quality of the wood is in some degree indicated by the color, which should be nearly uniform in the heart wood, a little deeper toward the centre, and without sudden transitions.

Felled timber should be immediately stripped of its bark, and raised from the ground.

As soon as practicable after the tree is felled, the sap-wood should be taken off, and the timber reduced, either by sawing or splitting, nearly to the dimensions required for use.

SEASONING AND PRESERVING TIMBER.

For the purpose of seasoning, timber should be piled under shelter, where it may be kept dry, but not exposed to a strong current of air; at the same time, there should be a free circulation of air about the timber, with which view slats or blocks of wood should be placed between the pieces that lie over each other, near enough to prevent the timber from bending.

In the sheds, the pieces of timber should be piled in this way, or in square piles, and classed according to age and kind Each pile should be distinctly marked with the number and kind of pieces, and the age, or the date of receiving them.

The piles should be taken down and made over again at intervals, varying with the length of time which the timber has been cut.

The seasoning of timber requires from two to four years, according to its size.

Gradual drying and seasoning in this manner is considered the most favoable to the durability and strength of timber, but various methods have been prepared for hastening the process. For this purpose, STEAMING and BOILING timber has been applied with success: KILN-DRYING is serviceable only for boards and pieces of small dimensions, and is apt to cause cracks, and to impair the strength of wood, unless performed very slowly.

Timber of large dimensions is improved by IMMERSION IN WATER for some weeks, according to its size, after which, it is less subject to warp and crack in steaming.

Oak timber loses about ONE-FIFTH OF ITS WEIGHT in seasoning, and about ONE-THIRD OF ITS WEIGHT in becoming dry.

TABLE I.

SCANTLING MEASURE,

ACCURATELY REDUCED TO INCH BOARD MEASURE.

EXPLANATION.

The length of any piece of scantling, or timber, will be found in the left-hand column, under the side dimensions. The breadth and depth, (or side dimensions,) in inches, will be found at the head of each column of computations. Thus, on page 10, a piece of scantling, 2¼ by 11 inches, side dimension, and 16 feet long, is shown to contain 36 feet and 8 inches of board measure. On page 12, a piece of scantling 4 by 10 inches, side dimension, and 17 feet long, is shown to contain 56 feet 8 inches, board measure. The answer sought for, in all cases, will be found directly on the right of the length, and under the side dimensions. If a piece of scantling, or stick of timber, should exceed, in length, any provision which has been made in these tables, its contents would be shown by taking twice what is given for half its length. Thus, a piece of scantling 46 feet long, would contain twice as many feet, board measure, as is shown in the table to be the contents of a stick 23 feet long. So, also, one 39 feet long would contain as many feet, board measure, as these tables show opposite to 22 and 17 feet long, or three times the contents of one 13 feet long.

SCANTLING MEASURE.

2 by 2.		2 by 3.		2 by 4.		2 by 5.		2 by 6.	
Length.		Length.		Length.		Length.		Length.	
1	0·4	1	0·6	1	0·8	1	0·10	1	1·
2	0·8	2	1·	2	1·4	2	1.8	2	2·
3	1·	3	1·6	3	2·	3	2·6	3	3.
4	1·4	4	2·	4	2·8	4	3·4	4	4·
5	1.8	5	2·6	5	3·4	5	4·2	5	5·
6	2.	6	3·	6	4·	6	5·	6	6·
7	2·4	7	3·6	7	4·8	7	5·10	7	7·
8	2.8	8	4·	8	5·4	8	6.8	8	8·
9	3·	9	4·6	9	6·	9	7·6	9	9·
10	3·4	10	5·	10	6·8	10	8·4	10	10·
11	3·8	11	5·6	11	7·4	11	9·2	11	11·
12	4·	12	6·	12	8·	12	10·	12	12·
13	4·4	13	6·6	13	8·8	13	10·10	13	13·
14	4·8	14	7·	14	9·4	14	11·8	14	14·
15	5·	15	7·6	15	10·	15	12·6	15	15·
16	5·4	16	8·	16	10·8	16	13·4	16	16·
17	5·8	17	8·6	17	11·4	17	14·2	17	17
18	6·	18	9·	18	12·	18	15·	18	18·
19	6·4	19	9·6	19	12·8	19	15·10	19	19·
20	6·8	20	10·	20	13·4	20	16·8	20	20·
21	7·	21	10·6	21	14·	21	17·6	21	21·
22	7·4	22	11·	22	14·8	22	18·4	22	22·
23	7·8	23	11·6	23	15·4	23	19· 2	23	23·
24	8·	24	12·	24	16·	24	20·	24	24·
25	8·4	25	12·6	25	16·8	25	20·10	25	25·
26	8·8	26	13·	26	17·4	26	21·8	26	26·
27	9·	27	13·6	27	18·	27	22·6	27	27·
28	9·4	28	14·	28	18·8	28	23·4	28	28·
29	9·8	29	14·6	29	19·4	29	24·2	29	29·
30	10·	30	15·	30	20·	30	25·	30	30·

SCANTLING MEASURE.

Length.	2 by 7.	Length.	2 by 8.	Length.	2 by 9.	Length.	2 by 10.	Length.	2 by 11.
1	1·2	1	1.4	1	1·6	1	1·8	1	1·10
2	2·4	2	2·8	2	3·	2	3.4	2	3·8
3	3·6	3	4·	3	4·6	3	5·	3	5·6
4	4·8	4	5·4	4	6·	4	6·8	4	7·4
5	5·10	5	6·8	5	7.6	5	8·4	5	9·2
6	7·	6	8·	6	9·	6	10·	6	11·
7	8·2	7	9·4	7	10·6	7	11·8	7	12·10
8	9·4	8	10·8	8	12·	8	13·4	8	14·8
9	10·6	9	12·	9	13·6	9	15·	9	16·6
10	11·8	10	13·4	10	15·	10	16·8	10	18·4
11	12·10	11	14·8	11	16·6	11	18·4	11	20·2
12	14·	12	16·	12	18·	12	20·	12	22·
13	15·2	13	17·4	13	19·6	13	21·8	13	23·10
14	16·4	14	18·8	14	21·	14	23·4	14	25·8
15	17·6	15	20·	15	22·6	15	25·	15	27·6
16	18·8	16	21·4	16	24·	16	26·8	16	29·4
17	19·10	17	22·8	17	25·6	17	28·4	17	31·2
18	21·	18	24·	18	27·	18	30·	18	33·
19	22·2	19	25·4	19	28·6	19	31.8	19	34·10
20	23·4	20	26·8	20	30·	20	33·4	20	36·8
21	24·6	21	28·	21	31·6	21	35·	21	38·6
22	25·8	22	29·4	22	33·	22	36·8	22	40·4
23	26·10	23	30·8	23	34·6	23	38·4	23	42·2
24	28·	24	32·	24	36·	24	40·	24	44·
25	29·2	25	33·4	25	37·6	25	41·8	25	45·10
26	30·4	26	34·8	26	39·	26	43·4	26	47·8
27	31·6	27	36·	27	40·6	27	45·	27	49·6
28	32·8	28	37.4	28	42·	28	46·8	28	51.4
29	33·10	29	38·8	29	43·6	29	48·4	29	53·2
30	35·	30	40·	30	45·	30	50·	30	55·

SCANTLING MEASURE.

Length.	2½ by 5.	Length.	2½ by 6.	Length.	2½ by 7.	Length.	2½ by 8.	Length.	2½ by 9.
1	1·1	1	1·3	1	1·6	1	1·8	1	1·11
2	2·1	2	2·6	2	2·11	2	3·4	2	3·9
3	3·1	3	3·9	3	4·5	3	5.	3	5·8
4	4·2	4	5·	4	5·10	4	6·8	4	7·6
5	5·3	5	6·3	5	7·4	5	8·4	5	9·5
6	6·3	6	7·6	6	8·9	6	10·	6	11·3
7	7·4	7	8·9	7	10·3	7	11·8	7	13·2
8	8·4	8	10·	8	11·8	8	13·4	8	15·
9	9·5	9	11·3	9	13·2	9	15·	9	16·11
10	10·5	10	12.6	10	14·7	10	16·8	10	18·9
11	11·6	11	13·9	11	16·1	11	18·4	11	20·8
12	12·6	12	15·	12	17·6	12	20·	12	22·6
13	13·7	13	16·3	13	19·	13	21·8	13	24·5
14	14·7	14	17·6	14	20·5	14	23·4	14	26·3
15	15·8	15	18·9	15	21·11	15	25·	15	28·2
16	16·8	16	20·	16	23·4	16	26·8	16	30·
17	17·9	17	21·3	17	24·10	17	28·4	17	31·11
18	18·9	18	22·6	18	26·3	18	30·	18	33·9
19	19·10	19	23·9	19	27·9	19	31·8	19	35·8
20	20·10	20	25·	20	29·2	20	33·4	20	37·6
21	21·11	21	26·3	21	30.8	21	35·	21	39·5
22	22·11	22	27·6	22	32·1	22	36·8	22	41·3
23	24·	23	28·9	23	33·7	23	38·4	23	43·2
24	25·	24	30·	24	35·	24	40·	24	45·
25	26·1	25	31·3	25	36·6	25	41·8	25	46·11
26	27·1	26	32·6	26	37·11	26	43.4	26	48·9
27	28·2	27	33·9	27	39·5	27	45·	27	50·8
28	29·2	28	35·	28	40·10	28	46·8	28	52·6
29	30·3	29	36·3	29	42·4	29	48·4	29	54·5
30	31·3	30	37·6	30	43·9	30	50·	30	56·3

SCANTLING MEASURE.

Length.	2½ by 10.	Length.	2½ by 11.	Length.	2½ by 12.	Length.	3 by 3.	Length.	3 by 4.
1	2.1	1	2.4	1	2.6	1	0.9	1	1·
2	4.2	2	4.7	2	5.	2	1.6	2	2·
3	6.3	3	6.11	3	7.6	3	2.3	3	3.
4	8.4	4	9.2	4	10.	4	3.	4	4·
5	10.5	5	11.6	5	12.6	5	3.9	5	5·
6	12.6	6	13.9	6	15.	6	4.6	6	6·
7	14.7	7	16.1	7	17.6	7	5.3	7	7·
8	16.8	8	18.4	8	20.	8	6.	8	8·
9	18.9	9	20.8	9	22.6	9	6.9	9	9·
10	20.10	10	22.11	10	25.	10	7.6	10	10·
11	22.11	11	25.3	11	27.6	11	8.3	11	11·
12	25.	12	27.6	12	30.	12	9.	12	12·
13	27.1	13	29.10	13	32.6	13	9.9	13	13·
14	29.2	14	32.1	14	35.	14	10.6	14	14·
15	31.3	15	34.4	15	37.6	15	11.3	15	15·
16	33.4	16	36.8	16	40.	16	12.	16	16·
17	35.5	17	39.	17	42.6	17	12.9	17	17·
18	37.6	18	41.3	18	45.	18	13.6	18	18·
19	39.7	19	43.7	19	47.6	19	14.3	19	19·
20	41.8	20	45.10	20	50.	20	15.	20	20·
21	43.9	21	48.2	21	52.6	21	15.9	21	21·
22	45.10	22	50.5	22	55.	½2	16.6	22	22·
23	47.11	23	52.9	23	57.6	23	17.3	23	23·
24	50.	24	55.	24	60.	24	18.	24	24·
25	52.1	25	57.4	25	62.6	25	18.9	25	25·
26	54.2	26	59.7	26	65.	26	19.6	26	26·
27	56.3	27	61.11	27	67.6	27	20.3	27	27·
28	58.4	28	64.2	28	70.	28	21.	28	28·
29	60.5	29	66.6	29	72.6	29	21.9	29	29·
30	62.6	30	68.9	30	75.	30	22.6	30	30·

SCANTLING MEASURE.

Length.	3 by 5.	Length.	3 by 6.	Length.	3 by 7.	Length.	3 by 8.	Length.	3 by 9.
1	1.3	1	1.6	1	1.9	1	2.	1	2.3
2	2.6	2	3.	2	3.6	2	4.	2	4.6
3	3.9	3	4.6	3	5.3	3	6.	3	6.9
4	5.	4	6.	4	7.	4	8.	4	9.
5	6.3	5	7.6	5	8.9	5	10.	5	11.3
6	7.6	6	9.	6	10.6	6	12.	6	13.6
7	8.9	7	10.6	7	12.3	7	14.	7	15.9
8	10.	8	12.	8	14.	8	16.	8	18.
9	11.3	9	13.6	9	15.9	9	18.	9	20.3
10	12.6	10	15.	10	17.6	10	20.	10	22.6
11	13.9	11	16.6	11	19.3	11	22.	11	24.9
12	15.	12	18.	12	21.	12	24.	12	27.
13	16.3	13	19.6	13	22.9	13	26.	13	29.3
14	17.6	14	21.	14	24.6	14	28.	14	31.6
15	18.9	15	22.6	15	26.3	15	30.	15	33.9
16	20.	16	24.	16	28.	16	32.	16	36.
17	21.3	17	25.6	17	29.9	17	34.	17	38.3
18	22.6	18	27.	18	31.6	18	36.	18	40.6
19	23.9	19	28.6	19	33.3	19	38.	19	42.9
20	25.	20	30.	20	35.	20	40.	20	45.
21	26.3	21	31.6	21	36.9	21	42.	21	47.3
22	27.6	22	33.	22	38.6	22	44.	22	49.6
23	28.9	23	34.6	23	40.3	23	46.	23	51.9
24	30.	24	36.	24	42.	24	48.	24	54.
25	31.3	25	37.6	25	43.9	25	50.	25	56.3
26	32.6	26	39.	26	45.6	26	52.	26	58.6
27	33.9	27	40.6	27	47.3	27	54.	27	60.9
28	35.	28	42.	28	49.	28	56.	28	63.
29	36.3	29	43.6	29	50.9	29	58.	29	65.3
30	37.6	30	45.	30	52.6	30	60.	30	67.6

SCANTLING MEASURE.

3 by 10.		3 by 11.		3 by 12.		4 by 4.		4 by 5.	
Length.		Length.		Length.		Length.		Length.	
1	2.6	1	2.9	1	3.	1	1.4	1	1.8
2	5.	2	5.6	2	6.	2	2.8	2	3.4
3	7.6	3	8 3	3	9.	3	4.	3	5.
4	10.	4	11.	4	12.	4	5.4	4	6.8
5	12.6	5	13.9	5	15.	5	6.8	5	8.4
6	15.	6	16.6	6	18.	6	8.	6	10.
7	17.6	7	19.3	7	21.	7	9.4	7	11.8
8	20.	8	22.	8	24.	8	10.8	8	13.4
9	22.6	9	24.9	9	27.	9	12.	9	15.
10	25.	10	27.6	10	30.	10	13.4	10	16.8
11	27.6	11	30.3	11	33	11	14.8	11	18.4
12	30.	12	33.	12	36.	12	16.	12	20.
13	32.6	13	35.9	13	39.	13	17.4	13	21.8
14	35.	14	38.6	14	42.	14	18.8	14	23.4
15	37.6	15	41.3	15	45.	15	20.	15	25.
16	40.	16	44.	16	48.	16	21.4	16	26.8
17	42.6	17	46.9	17	51.	17	22.8	17	28.4
18	45.	18	49.6	18	54.	18	24.	18	30.
19	47.6	19	52.3	19	57.	19	25.4	19	31.8
20	50.	20	55.	20	60.	20	26.8	20	33.4
21	52.6	21	57.9	21	63.	21	28.	21	35.
22	55.	22	60.6	22	66.	22	29.4	22	36.8
23	57.6	23	63.3	23	69.	23	30.8	23	38 4
24	60.	24	66.	24	72.	24	32.	24	40.
25	62.6	25	68.9	25	75.	25	33.4	25	41.8
26	65.	26	71.6	26	78.	26	34.8	26	43.4
27	67.6	27	74.3	27	81.	27	36.	27	45.
28	70.	28	77.	28	84.	28	37.4	28	46.8
29	72.6	29	79.9	29	87.	29	38.8	29	48.4
30	75.	30	82.6	30	90.	30	40.	30	50.

SCANTLING MEASURE.

Length.	4 by 6.	Length.	4 by 7.	Length.	4 by 8.	Length.	4 by 9.	Length.	4 by 10.
1	2.	1	2.4	1	2.8	1	3.	1	3.4
2	4.	2	4.8	2	5.4	2	6.	2	6.8
3	6.	3	7.	3	8.	3	9.	3	10.
4	8.	4	9.4	4	10.8	4	12.	4	13.4
5	10.	5	11.8	5	13.4	5	15.	5	16.8
6	12.	6	14.	6	16.	6	18.	6	20.
7	14.	7	16.4	7	18.8	7	21.	7	23.4
8	16.	8	18.8	8	21.4	8	24.	8	26.8
9	18.	9	21.	9	24.	9	27.	9	30.
10	20.	10	23.4	10	26.8	10	30.	10	33.4
11	22.	11	25.8	11	29.4	11	33.	11	36.8
12	24.	12	28.	12	32.	12	36.	12	40.
13	26.	13	30.4	13	34.8	13	39.	13	43.4
14	28.	14	32.8	14	37.4	14	42.	14	46.8
15	30.	15	35.	15	40.	15	45.	15	50.
16	32.	16	37.4	16	42.8	16	48.	16	53.4
17	34.	17	39.8	17	45.4	17	51.	17	56.8
18	36.	18	42.	18	48.	18	54.	18	60.
19	38.	19	44.4	19	50.8	19	57.	19	63.4
20	40.	20	46.8	20	53.4	20	60.	20	66.8
21	42.	21	49.	21	56.	21	63.	21	70.
22	44.	22	51.4	22	58.8	22	66.	22	73.4
23	46.	23	53.8	23	61.4	23	69.	23	76.8
24	48.	24	56.	24	64.	24	72.	24	80.
25	50.	25	58.4	25	66.8	25	75.	25	83.4
26	52.	26	60.8	26	69.4	26	78.	26	86.8
27	54.	27	63.	27	72.	27	81.	27	90.
28	56.	28	65.4	28	74.8	28	84.	28	93.4
29	58.	29	67.8	29	77.4	29	87.	29	96.8
30	60.	30	70.	30	80.	30	90.	30	100.

SCANTLING MEASURE.

4 by 11.		4 by 12.		5 by 5.		5 by 6.		5 by 7.	
Length.		Length.		Length.		Length.		Length.	
1	3.8	1	4.	1	2.1	1	2.6	1	2.11
2	7.4	2	8.	2	4.2	2	5.	2	5.10
3	11.	3	12.	3	6.3	3	7.6	3	8.9
4	14.8	4	16.	4	8.4	4	10.	4	11.8
5	18.4	5	20.	5	10.5	5	12.6	5	14.7
6	22.	6	24.	6	12.6	6	15.	6	17.6
7	25.8	7	28.	7	14.7	7	17.6	7	20.5
8	29.4	8	32.	8	16.8	8	20.	8	23.4
9	33.	9	36.	9	18.9	9	22.6	9	26.3
10	36.8	10	40.	10	20.10	10	25.	10	29.2
11	40.4	11	44.	11	22.11	11	27.6	11	32.1
12	44.	12	48.	12	25.	12	30.	12	35.
13	47.8	13	52.	13	27.1	13	32.6	13	37.11
14	51.4	14	56.	14	29.2	14	35.	14	40.10
15	55.	15	60.	15	31.3	15	37.6	15	43.9
16	58.8	16	64.	16	33.4	16	40.	16	46.8
17	62.4	17	68.	17	35.5	17	42.6	17	49.7
18	66.	18	72.	18	37.6	18	45.	18	52.6
19	69.8	19	76.	19	39.7	19	47.6	19	55.5
20	73.4	20	80.	20	41.8	20	50.	20	58.4
21	77.	21	84.	21	43.9	21	52.6	21	61.3
22	80.8	22	88.	22	45.10	22	55.	22	64.2
23	84.4	23	92.	23	47.11	23	57.6	23	67.1
24	88.	24	96.	24	50.	24	60.	24	70.
25	91.8	25	100.	25	52.1	25	62.6	25	72.11
26	95.4	26	104.	26	54.2	26	65.	26	75.10
27	99.	27	108.	27	56.3	27	67.6	27	78.9
28	102.8	28	112.	28	58.4	28	70.	28	81.8
29	106.4	29	116.	29	60.5	29	72.6	29	84.7
30	110.0	30	120.	30	62.6	30	75.	30	87.6

SCANTLING MEASURE.

5 by 8.		5 by 9.		5 by 10.		6 by 6.		6 by 7.	
Length		Length		Length		Length		Length	
1	3.4	1	3.9	1	4.2	1	3.	1	3.6
2	6.8	2	7.6	2	8.4	2	6.	2	7.
3	10.	3	11.3	3	12.6	3	9.	3	10.6
4	13.4	4	15.	4	16.8	4	12.	4	14.
5	16.8	5	18.9	5	20.10	5	15.	5	17.6
6	20.	6	22.6	6	25.	6	18.	6	21.
7	23·4	7	26.3	7	29.2	7	21.	7	24.6
8	26.8	8	30.	8	33.4	8	24.	8	28.
9	30.	9	33.9	9	37.6	9	27.	9	31.6
10	33.4	10	37.6	10	41.8	10	30.	10	35.
11	36.8	11	41.3	11	45.10	11	33.	11	38.6
12	40.	12	45.	12	50.	12	36.	12	42.
13	43.4	13	48.9	13	54.2	13	39.	13	45.6
14	46.8	14	52.6	14	58.4	14	42.	14	49.
15	50.	15	56.3	15	62.6	15	45.	15	52.6
16	53.4	16	60.	16	66.8	16	48.	16	56.
17	56.8	17	63.9	17	70.10	17	51.	17	59.6
18	60.	18	67.6	18	75.	18	54.	18	63.
19	63.4	19	71.3	19	79.2	19	57.	19	66.6
20	66.8	20	75.	20	83.4	20	60.	20	70.
21	70.	21	78.9	21	87.6	21	63.	21	73.6
22	73.4	22	82.6	22	91.8	22	66.	22	77.
23	76.8	23	86.3	23	95.10	23	69.	23	80.6
24	80.	24	90.	24	100.	24	72.	24	84.
25	83.4	25	93.9	25	104.2	25	75.	25	87.6
26	86.8	26	97.6	26	108.4	26	78.	26	91.
27	90.	27	101.3	27	112.6	27	81.	27	94.6
28	93.4	28	105.	28	116.8	28	84.	28	98.
29	96.8	29	108.9	29	120.10	29	87.	29	101.6
30	100.	30	112.6	30	125.	30	90.	30	105.

SCANTLING MEASURE.

6 by 8.		7 by 7.		7 by 8.		7 by 9.		8 by 8.	
Length.		Length.		Length.		Length.		Length.	
1	4.	1	4.1	1	4.8	1	5.3	1	5.4
2	8.	2	8.2	2	9.4	2	10.6	2	10.8
3	12.	3	12.3	3	14.	3	15.9	3	16.
4	16.	4	16.4	4	18.8	4	21.	4	21.4
5	20.	5	20.5	5	23.4	5	26.3	5	26.8
6	24.	6	24.6	6	28.	6	31.6	6	32.
7	28.	7	28.7	7	32.8	7	36.9	7	37.4
8	32.	8	32·8	8	37.4	8	42.	8	42.8
9	36.	9	36.9	9	42.	9	47.3	9	48.
10	40.	10	40.10	10	46.8	10	52.6	10	53.4
11	44.	11	44.11	11	51.4	11	57.9	11	58.8
12	48.	12	49.	12	56.	12	63.	12	64
13	52.	13	53 1	13	60.8	13	68.3	13	69.4
14	56.	14	57.2	14	65.4	14	73.6	14	74.8
15	60.	15	61.3	15	70.	15	78.9	15	80.
16	64.	16	65.4	16	74.8	16	84.	16	85.4
17	68.	17	69.5	17	79.4	17	89.3	17	90.8
18	72.	18	73.6	18	84.	18	94.6	18	96.
19	76.	19	77.7	19	88.8	19	99.9	19	101.4
20	80.	20	81.8	20	93.4	20	105.	20	106.8
21	84.	21	85.9	21	98.	21	110.3	21	112.
22	88.	22	89.10	22	102.8	22	115.6	22	117.4
23	92.	23	93.11	23	107.4	23	120.9	23	122.8
24	96.	24	98.	24	112.	24	126.	24	128.
25	100.	25	102.1	25	116.8	25	131.3	25	133.4
26	104.	26	106.2	26	121.4	26	136.6	26	138.8
27	108.	27	110.3	27	126.	27	141.9	27	144.
28	112.	28	114.4	28	130.8	28	147.	28	149.4
29	116.	29	118.5	29	135.4	29	152.3	29	154.8
30	120.	30	122.6	30	140.	30	157.6	30	160.

SCANTLING MEASURE.

8 by 9.		8 by 10.		9 by 9.		9 by 10.		9 by 11.	
Length.		Length.		Length.		Length.		Length.	
1	6.	1	6.8	1	6.9	1	7.6	1	8.3
2	12.	2	13.4	3	13.6	2	15.	2	16.6
3	18.	3	20.	2	20.3	3	22.6	3	24.9
4	24.	4	26.8	4	27.	4	30.	4	33.
5	30.	5	33.4	5	33.9	5	37.6	5	41.3
6	36.	6	40.	6	40.6	6	45.	6	49.6
7	42.	7	46.8	7	47.3	7	52.6	7	57.9
8	48.	8	53.4	9	54.	8	60.	8	66.
9	54.	9	60.	8	60.9	9	67.6	9	74.3
10	60.	10	66.8	10	67.6	10	75.	10	82.6
11	66.	11	73.4	11	74.3	11	82.6	11	90.9
12	72.	12	80.	12	81.	12	90.	12	99.
13	78.	13	86.8	13	87.9	13	97.6	13	107.3
14	84.	14	93.4	14	94.6	14	105.	14	115.6
15	90.	15	100.	15	101.3	15	112.6	15	123.9
16	96.	16	106.8	16	108.	16	120.	16	132.
17	102.	17	113.4	17	114.9	17	127.6	17	140.3
18	108.	18	120.	18	121.6	18	135.	18	148.6
19	114.	19	126.8	19	128.3	19	142.6	19	156.9
20	120.	20	133.4	20	135.	20	150.	20	165.
21	126.	21	140.	21	141.9	21	157.6	21	173.3
22	132.	22	146.8	22	148.6	22	165.	22	181.6
23	138.	23	153.4	23	155.3	23	172.6	23	189.9
24	144.	24	160.	24	162.	24	180.	24	198.
25	150.	25	166.8	25	168.9	25	187.6	25	206.3
26	156.	26	173.4	26	175.6	26	195.	26	214.6
27	162.	27	180.	27	182.3	27	202.6	27	222.9
28	168.	28	186.8	28	189.	28	210.	28	231.
29	174.	29	193.4	29	195.9	29	217.6	29	239.3
30	180.	30	200.	30	202.6	30	225.	30	247.6

SCANTLING MEASURE.

Length.	10 by 10.	Length.	10 by 11.	Length.	10 by 12.	Length.	11 by 11.	Length.	11 by 12.
1	8.4	1	9.2	1	10.	1	10.1	1	11.
2	16.8	2	18.4	2	20.	2	20.2	2	22.
3	25.	3	27.6	3	30.	3	30.3	3	33.
4	33.4	4	36.8	4	40.	4	40.4	4	44.
5	41.8	5	45.10	5	50.	5	50.5	5	55.
6	50.	6	55.	6	60.	6	60.6	6	66.
7	58.4	7	64.2	7	70.	7	70.7	7	77.
8	66.8	8	73.4	8	80.	8	80.8	8	88.
9	75.	9	82.6	9	90.	9	90.9	9	99.
10	83.4	10	91.8	10	100.	10	100.10	10	110.
11	91.8	11	100.10	1	110.	11	110.11	11	121.
12	100.	12	110.	1	120.	12	121.	12	132.
13	108.4	13	119.2	13	130.	13	131.1	13	143.
14	116.8	14	128.4	14	140.	14	141.2	14	154.
15	125.	15	137.6	15	150.	15	151.3	15	165.
16	133.4	16	146.8	16	160.	16	161.4	16	176.
17	141.8	17	155.10	17	170.	17	171.5	17	187.
18	150.	18	165.	18	180.	18	181.6	18	198.
19	158.4	19	174.2	19	190.	19	191.7	19	209.
20	166.8	20	183.4	20	200.	20	201.8	20	220.
21	175.	21	192.6	21	210.	21	211.9	21	231.
22	183.4	22	201.8	22	220.	22	221.10	22	242.
23	191.8	23	210.10	23	230.	23	231.11	23	253.
24	200.	24	220.	24	240.	24	242.	24	264.
25	208.4	25	229.2	25	250.	25	252.1	25	275.
26	216.8	26	238.4	26	260.	26	262.2	26	286.
27	225.	27	247.6	27	270.	27	272.3	27	297.
28	233.4	28	256.8	28	280.	28	282.4	28	308.
29	241.8	29	265.10	29	290.	29	292.5	29	319.
30	250.0	30	275.0	30	300.	30	302.6	30	330.

TABLE II.

BOARD MEASURE.

EXPLANATION.

The length of any board will be found in feet at the top of the column, and the width in inches in the left hand column.

To find the number of feet B. M. in any board, find the length at the top of the column and the width in the left hand column; trace the lines until they meet, and you will find the amount sought for. For example: On page 23, a board 10 feet long and 18 inches wide is shown to contain fifteen feet board measure.

BOARD MEASURE.

LENGTH IN FEET.

INS.	4.	5.	6.	7.	8.	9.	10.
6	2.00	2.06	3.00	3.06	4.00	4.06	5.00
7	2.04	2.11	3.06	4.01	4.08	50.3	5.10
8	2.08	3.04	4.00	4.08	5.04	6.00	6.08
9	3.00	3.09	4.06	5.03	6.00	6.09	7.06
10	3.04	4.02	5.00	5.10	6.08	7.06	8.04
11	3.08	4.07	5.06	6.05	7.04	8.03	9.02
12	4.00	5.00	6.00	7.00	8.00	9.00	10.00
13	4.04	5.05	6.06	7.07	8.08	9.09	10.10
14	4.08	5.10	7.00	8.02	9.04	10.06	11.08
15	5.00	6.03	7.06	8.09	10.00	11.03	12.06
16	5.04	6.08	8.00	9.04	10.08	12.00	13.04
17	5.08	7.01	8.06	9.11	11.04	12.09	14.02
18	6.00	7.06	9.00	10.06	12.00	13.06	15.00
19	6.04	7.11	9.06	11.01	12.08	14.03	15.10
20	6.08	8.04	10.00	11.08	13.04	15.00	16.08
21	7.00	8.09	10.06	12.03	14.00	15.09	17.06
22	7.04	9.02	11.00	12.10	14.08	16.06	18.04
23	7.08	9.07	11.06	13.05	15.04	17.03	19.02
24	8.00	10.00	12.00	14.00	16.00	18.00	20.00
25	8.04	10.05	12.06	14.07	16.08	18.09	20.10
26	8.08	10.10	13.00	15.02	17.04	19.06	21.08
27	9.00	11.03	13.06	15.09	18.00	20.03	22.06
28	9.04	11.08	14.00	16 04	18.08	21.00	23.04
29	9.08	12.01	14.06	16.11	19.04	21.09	24.02
30	10.00	12.06	15.00	17.06	20.00	22.06	25.00

*.*The width is in the margin—length at the head.

BOARD MEASURE.

LENGTH IN FEET.

INS.	11.	12.	13.	14.	15.	16.	17.
3	2.09	3.00	3.03	3.06	3.09	4.00	4.03
4	3.08	4.00	4.04	4.08	5.00	5.04	5.08
5	4.07	5.00	5.05	5.10	6.03	6.08	7.01
6	5.06	6.00	6.06	7.00	7.06	8.00	8.06
7	6.05	7.00	7.07	8.02	8.09	9.04	9.11
8	7.04	8.00	8.08	9.04	10.00	10.08	11.04
9	8.03	9.00	9.09	10.06	11.03	12.00	12.09
10	9.02	10.00	10.10	11.08	12.06	13.04	14.02
11	10.01	11.00	11.11	12.10	13.09	14.08	15.07
12	11.00	12.00	13.00	14.00	15.00	16.00	17.00
13	11.11	13.00	14.01	15.02	16.03	17.04	18.05
14	12.10	14.00	15.02	16.04	17.06	18.08	19.10
15	13.09	15.00	16.03	17.06	18.09	20.00	21.03
16	14.08	16.00	17.04	18.08	20.00	21.04	22.08
17	15.07	17.00	18.05	19.10	21.03	22.08	24.01
18	16.06	18.00	19.06	21.00	22.06	24.00	25.06
19	17.05	19.00	20.07	22.02	23.09	25.04	26.11
20	18.04	20.00	21.08	23.04	25.00	26.08	28.04
21	19.03	21.00	22.09	24.06	26.03	28.00	29.09
22	20.02	22.00	23.10	25.08	27.06	29.04	31.02
23	21.01	23.00	24.11	26.10	28.09	30.08	32.07
24	22.00	24.00	26.00	28.00	30.00	32.00	34.00
25	22.11	25.00	27.01	29.02	31.03	33.04	35.05
26	23.10	26.00	28.02	30.04	32.06	34.08	36.10
27	24.09	27.00	29.03	31.06	33.09	36.00	38.03
28	25.08	28.00	30.04	32.08	35.00	37.04	39.08
29	26.07	29.00	31.05	33.10	36.03	38.08	41.01
30	27.06	30.00	32.06	35.00	37.06	40.00	42.06

***The width is in the margin—length at the head.

BOARD MEASURE.

LENGTH IN FEET.

INS.	18.	19.	20.	21.	22.	23.	24.
3	4.06	4.09	5.00	5.03	5.06	5.09	6.00
4	6.00	6.04	6.08	7.00	7.04	7.08	8.00
5	7.03	7.11	8.04	8.09	9.02	9.07	10.00
6	9.00	9.06	10.00	10.06	11.00	11.06	12.00
7	10.06	11.01	11.08	12.03	12.10	13.05	14.00
8	12.00	12.08	13.04	14.00	14.08	15.04	16.00
9	13.06	14.03	15.00	15.09	16.06	17.03	18.00
10	15.00	15.10	16.08	17.06	18.04	19.02	20.00
11	16.06	17.05	18.04	19.03	20.02	21.01	22.00
12	18.00	19.00	20.00	21.00	22.00	23.00	24.00
13	19.06	20.07	21.08	22.09	23.10	24.11	26.00
14	21.00	22.02	23.04	24.06	25.08	26.10	28.00
15	22.06	23.09	25.00	26.03	27.06	28.09	30.00
16	24.00	25.04	26.08	28.00	29.04	30.08	32.00
17	25.06	26.11	28.04	29.09	31.02	32.07	34.00
18	27.00	28.06	30.00	31.06	33.00	34.06	36.00
19	28.06	30.01	31.08	33.03	34.10	36.05	38.00
20	30.00	31.08	33.04	35.00	36.08	38.04	40.00
21	31.06	33.03	35.00	36.09	38.06	40.03	42.00
22	33.00	34.10	36.08	38.06	40.04	42.02	44.00
23	34.06	36.05	38.04	40.03	42.02	44.01	46.00
24	36.00	38.00	40.00	42.00	44.00	46.00	48.00
25	37.06	39.07	41.08	43.09	45.10	47.11	50.00
26	39.00	41.02	43.04	45.06	47.08	49.10	52.00
27	40.06	42.09	45.00	47.03	49.06	51.09	54.00
28	42.00	44.04	46.08	49.00	51.04	53.08	56.00
29	43.06	45.11	48.04	50.09	53.02	55.07	58.00
30	45.00	47.06	50.00	52.06	55.00	57.06	60.00

*,*The width is in the margin—length at the head.

TABLE III.

PLANK MEASURE.

EXPLANATION.

The following tables show at one view, the number of feet, board-measure, contained in any ship, or other plank, from 24 to 52 feet in length, and from 1½ inches in thickness to 4, varying from ¼ to the ½ an inch, and from 10 inches to 28 in width.

The length of any plank will be found in the left-hand column of the table, and the width and thickness at the head of the page.

To find the number of feet which any plank will give, take the length in the left-hand column of the table, and the width and thickness at the top of the page—trace the two lines until they meet, and you will have the amount sought for.

For Example: a plank 47 feet in length, 2½ inches thick, by 23 inches in width, will give 225 feet, the required sum. If the plank exceeds in length any provision which is made in these tables, its contents would be shown by taking twice what is given for half its length; and, for a lesser length, half what is shown for twice its length. In all cases, in these computations, the smaller fractions of a foot are omitted, while the larger ones are reckoned a foot: this is sufficiently correct for all practical purposes.

PLANK MEASURE.

L. Ft.	1¾ by 10.	1¾ by 11.	1¾ by 12.	1¾ by 13.	1¾ by 14.	1¾ by 15.	1¾ by 16.	1¾ by 17.	1¾ by 18.
24	35	39	42	45	49	52	56	59	63
25	36	40	44	47	51	55	59	62	66
26	38	42	45	49	53	57	61	64	68
27	39	43	47	51	55	59	63	67	71
28	41	45	49	53	57	61	65	69	73
29	42	47	51	55	59	63	68	72	76
30	43	48	52	57	61	65	70	74	79
31	45	50	54	59	63	68	72	77	81
32	47	51	56	61	65	70	75	79	84
33	48	53	58	63	67	72	77	82	87
34	49	55	59	64	69	74	79	84	89
35	51	56	61	66	71	76	82	87	92
36	52	58	63	68	73	79	84	89	94
37	54	59	65	70	75	81	86	92	97
38	55	61	66	72	77	83	89	94	100
39	57	63	68	74	80	85	91	97	102
40	58	64	70	76	82	87	93	99	105
41	60	67	72	78	84	90	96	102	108
42	61	69	73	80	86	92	98	104	110
43	63	71	75	82	88	94	100	108	113
44	64	73	77	83	90	96	103	109	115
45	65	74	79	85	92	98	105	112	118
46	67	76	80	87	94	101	107	114	121
47	68	78	82	89	96	103	110	117	123
48	70	79	84	91	98	105	112	119	126
49	71	80	86	93	100	107	114	121	129
50	73	82	88	94	102	109	117	124	131
51	74	83	89	97	104	112	119	126	134
52	76	84	91	99	106	114	121	129	136

PLANK MEASURE.

L. Ft.	1¾ by 19.	1¾ by 20.	1¾ by 21.	1¾ by 22.	1¾ by 23.	1¾ by 24.	1¾ by 25.	1¾ by 26	1¾ by 27.
24	66	70	74	77	81	84	88	91	94
25	69	73	77	80	84	87	91	95	98
26	72	76	80	83	87	91	95	99	102
27	74	79	83	87	91	94	98	102	106
28	77	82	86	90	94	98	102	106	110
29	80	85	89	93	97	101	106	110	114
30	83	87	92	96	101	105	109	114	118
31	85	90	95	99	104	108	113	118	122
32	88	93	98	103	107	112	117	121	126
33	91	96	101	106	111	115	120	125	130
34	93	99	104	109	114	119	124	129	134
35	95	102	107	112	117	122	128	133	138
36	98	105	110	115	121	126	131	136	142
37	101	108	114	119	124	129	135	140	146
38	104	111	117	122	127	133	138	144	150
39	107	114	120	125	131	136	142	148	154
40	109	117	123	128	134	140	146	152	158
41	113	120	126	132	137	143	149	155	162
42	115	122	129	135	141	147	153	159	166
43	118	125	132	138	144	150	156	163	170
44	121	128	135	141	147	154	160	167	174
45	123	131	138	144	151	157	164	171	178
46	126	134	141	148	154	161	167	174	180
47	129	137	144	151	158	164	171	178	184
48	132	140	147	154	161	168	174	182	188
49	134	143	150	157	164	171	178	186	192
50	136	146	153	160	168	175	182	190	196
51	139	149	156	164	171	178	185	193	200
52	141	152	159	167	174	182	189	197	204

PLANK MEASURE.

L. Ft.	2 by 12.	2 by 13.	2 by 14.	2 by 15.	2 by 16.	2 by 17.	2 by 18.	2 by 19.	2 by 20.
24	48	52	56	60	64	68	72	76	80
25	50	54	58	62	67	71	75	79	83
26	52	56	61	65	69	74	78	82	87
27	54	59	63	67	72	76	81	85	90
28	56	61	65	70	75	79	84	89	93
29	58	63	68	72	77	82	87	92	97
30	60	65	70	75	80	85	90	95	100
31	62	67	72	77	83	88	93	98	103
32	64	69	75	80	85	91	96	101	107
33	66	71	77	82	88	93	99	104	110
34	68	74	79	85	91	96	102	108	113
35	70	76	82	87	93	99	105	111	117
36	72	78	84	90	96	102	108	114	120
37	74	80	86	92	99	105	111	117	123
38	76	82	89	95	101	108	114	120	127
39	78	84	91	97	104	110	117	123	130
40	80	87	93	100	107	113	120	127	133
41	82	89	96	102	109	116	123	130	137
42	84	91	98	105	112	119	126	133	140
43	86	93	100	107	115	122	129	136	143
44	88	95	103	110	117	125	132	139	147
45	90	97	105	112	120	127	135	142	150
46	92	99	107	115	123	130	138	146	153
47	94	102	110	117	125	133	141	149	157
48	96	104	112	120	128	136	144	152	160
49	98	106	114	122	131	139	147	155	163
50	100	108	117	125	133	142	150	158	167
51	102	110	119	127	136	144	153	161	170
52	104	112	121	130	139	147	156	165	173

PLANK MEASURE.

L. Ft.	2 by 21.	2 by 22.	2 by 23.	2 by 24.	2 by 25.	2 by 26.	2 by 27.	2 by 28.	1¼ by 18.
24	84	88	92	96	100	104	108	112	45
25	87	92	96	100	104	108	112	117	47
26	91	95	100	104	108	113	117	121	49
27	94	99	103	108	112	117	121	126	51
28	98	103	107	112	117	121	126	131	52
29	101	106	111	116	121	126	130	139	54
30	105	110	115	120	125	130	135	140	56
31	108	114	119	124	129	134	139	145	58
32	112	117	123	128	133	139	144	149	60
33	115	121	126	132	137	143	148	154	62
34	119	125	130	136	141	147	153	159	64
35	122	128	134	140	146	152	157	163	66
36	126	132	138	144	150	156	162	168	67
37	129	136	142	148	154	160	166	173	69
38	133	139	146	152	158	165	171	177	71
39	136	143	149	156	162	169	175	182	73
40	140	147	153	160	167	173	180	187	75
41	143	150	157	164	171	178	184	191	77
42	147	154	161	168	175	182	189	196	79
43	150	158	165	172	179	186	193	201	81
44	154	161	169	176	183	191	198	205	83
45	157	165	172	180	187	195	202	210	84
46	160	169	176	184	192	199	207	215	86
47	164	172	180	188	196	204	211	219	88
48	168	176	184	192	200	208	216	224	90
49	171	180	188	196	204	212	220	229	92
50	175	183	192	200	208	217	225	233	94
51	178	187	195	204	213	221	229	238	96
52	182	190	199	208	217	225	234	243	98

PLANK MEASURE.

L. Ft.	2¼ by 11.	2¼ by 12.	2¼ by 13.	2¼ by 14.	2¼ by 15.	2¼ by 16.	2¼ by 17.	2¼ by 18.	2¼ by 19.
24	49	54	58	64	68	72	77	80	86
25	52	56	61	66	70	75	80	84	89
26	54	59	63	68	73	78	83	88	93
27	56	61	66	71	76	81	86	91	96
28	58	63	68	73	79	84	89	94	100
29	60	65	71	76	82	87	92	98	103
30	62	68	73	79	84	90	96	101	107
31	64	70	76	81	87	93	99	105	110
32	66	72	78	84	90	96	101	108	114
33	68	74	80	86	93	99	104	111	118
34	70	77	83	89	96	102	109	115	121
35	72	79	85	92	98	105	112	118	125
36	74	81	88	94	101	108	115	121	128
37	76	83	90	97	104	111	118	125	132
38	78	86	92	100	107	114	121	128	135
39	80	88	95	102	110	117	124	131	139
40	82	90	97	105	112	120.	128	135	142
41	85	92	100	107	115	123	131	138	146
42	87	95	102	110	118	126	134	142	150
43	89	97	105	113	122	129	137	145	153
44	91	99	107	115	125	132	140	148	157
45	93	102	110	118	127	135	144	152	160
46	95	104	112	121	130	138	147	155	164
47	97	106	115	123	133	141	150	159	167
48	99	108	117	126	136	144	153	162	171
49	101	111	119	128	139	147	156	165	175
50	103	113	122	131	141	150	159	169	178
51	105	115	124	134	144	153	163	172	182
52	107	117	127	136	146	156	166	175	185

PLANK MEASURE.

L. Ft.	2¼ by 20.	2¼ by 21.	2¼ by 22.	2¼ by 23.	2¼ by 24.	2¼ by 25.	2¼ by 26.	2¼ by 27.	2½ by 12.
24	90	95	99	104	108	113	117	121	60
25	94	98	103	108	112	117	122	127	62
26	97	102	107	112	117	122	127	132	65
27	101	106	111	116	121	127	132	137	67
28	105	110	115	121	126	131	136	142	70
29	109	114	119	125	130	136	141	147	72
30	112	118	123	129	135	141	146	152	75
31	116	122	127	134	139	145	151	157	77
32	120	126	131	138	144	150	156	162	80
33	124	130	135	142	148	155	161	167	82
34	127	134	140	147	153	159	166	172	85
35	131	138	144	151	157	164	171	177	87
36	135	142	148	155	162	169	175	182	90
37	139	146	152	160	166	173	180	187	92
38	143	150	156	164	171	178	185	192	95
39	146	154	160	168	175	183	190	197	97
40	150	158	164	172	180	187	195	202	100
41	154	162	168	177	184	192	200	207	102
42	158	166	172	181	189	197	205	213	105
43	162	170	177	185	193	201	210	218	107
44	165	174	181	190	198	206	215	223	110
45	169	178	185	194	202	211	220	228	112
46	173	182	189	198	207	215	224	232	115
47	176	186	193	203	211	220	229	238	117
48	180	189	197	207	216	225	234	243	120
49	183	193	201	211	220	229	239	248	122
50	187	197	205	215	225	234	244	253	125
51	191	201	210	220	229	239	249	258	127
52	195	205	214	224	234	244	254	263	130

PLANK MEASURE.

L. Ft.	2½ by 13.	2½ by 14.	2½ by 15.	2½ by 16.	2½ by 17.	2½ by 18.	2½ by 19.	2½ by 20.	2½ by 21.
24	65	70	75	80	85	90	95	100	105
25	68	73	78	83	89	94	99	104	109
26	70	76	81	87	92	97	103	108	114
27	73	79	84	90	96	101	107	112	118
28	76	82	87	93	99	105	111	117	122
29	79	85	91	97	103	109	115	121	127
30	81	87	94	100	106	112	119	125	131
31	84	90	97	103	110	116	123	129	136
32	86	93	100	107	113	120	127	133	140
33	89	96	103	110	117	124	131	137	144
34	92	99	106	113	120	127	135	142	149
35	95	102	109	117	124	131	139	146	153
36	97	105	113	120	127	135	143	150	157
37	100	108	116	123	131	139	147	154	162
38	103	111	119	127	135	142	150	158	166
39	106	114	122	130	138	146	154	162	171
40	108	117	125	133	142	150	158	168	175
41	111	120	128	137	145	154	162	171	179
42	114	122	131	140	149	157	166	175	184
43	116	125	134	143	152	161	170	179	188
44	119	128	137	147	156	165	174	183	192
45	122	131	140	150	159	169	178	187	197
46	125	134	144	153	163	172	182	192	201
47	127	137	147	157	166	176	186	196	206
48	130	140	150	160	170	180	190	200	210
49	133	143	153	163	174	184	194	204	215
50	135	146	[illegible]	167	177	187	198	208	219
51	138	149	159	170	181	191	202	212	223
52	141	152	162	173	185	195	206	216	227

PLANK MEASURE.

L. Ft.	2½ by 22.	2½ by 23.	2½ by 24.	2½ by 25.	2½ by 26.	2½ by 27.	2½ by 28.	3 by 12.	3 by 13.
24	110	115	120	125	130	135	140	72	78
25	115	120	125	130	135	141	146	75	81
26	119	125	130	135	141	146	152	78	84
27	124	129	135	141	146	152	157	81	88
28	128	134	140	146	152	158	163	84	91
29	133	139	145	151	157	163	169	87	94
30	137	144	150	156	163	169	175	90	98
31	142	148	155	161	168	175	181	93	101
32	147	153	160	167	173	180	187	96	104
33	151	158	165	172	179	186	193	99	107
34	156	163	170	177	184	191	198	102	111
35	160	168	175	182	190	197	204	105	114
36	165	172	180	187	195	203	210	108	117
37	170	177	185	193	200	208	216	111	120
38	174	182	190	198	206	214	222	114	123
39	179	187	195	203	211	220	227	117	127
40	183	192	200	208	217	225	233	120	130
41	188	196	205	214	222	231	239	123	133
42	192	201	210	219	228	237	245	126	136
43	197	206	215	224	233	242	251	129	140
44	202	211	220	229	238	248	256	132	143
45	206	216	225	234	244	253	262	135	146
46	211	220	230	240	249	259	268	138	149
47	215	225	235	245	254	265	274	141	152
48	220	230	240	250	260	270	280	144	156
49	225	235	245	255	265	276	286	147	159
50	229	240	250	260	271	282	292	150	162
51	234	244	255	266	276	289	298	153	165
52	238	249	260	270	282	293	303	156	169

PLANK MEASURE.

L. Ft.	3 by 14.	3 by 15.	3 by 16.	3 by 17.	3 by 18.	3 by 19.	3 by 20.	3 by 21.	3 by 22.
24	84	90	96	102	108	114	120	126	132
25	87	94	100	106	112	119	125	131	138
26	91	97	104	110	117	123	130	136	143
27	94	101	108	115	121	128	135	142	149
28	98	105	112	119	126	133	140	147	154
29	101	109	116	123	130	138	145	152	160
30	105	112	120	127	135	142	150	157	165
31	108	116	124	132	139	147	155	163	171
32	112	120	128	136	144	151	160	168	176
33	115	124	132	140	149	156	165	173	182
34	119	127	136	144	153	161	170	178	187
35	122	131	140	149	157	166	175	184	193
36	126	135	144	153	162	170	180	189	198
37	129	139	148	157	166	175	185	194	204
38	133	142	152	161	171	180	190	199	209
39	136	146	156	166	175	185	195	204	215
40	140	150	160	170	180	189	200	210	220
41	143	154	164	174	184	194	205	215	226
42	147	157	168	178	189	199	210	220	231
43	150	161	172	183	193	204	215	225	236
44	154	165	176	187	198	208	220	231	242
45	157	169	180	191	202	213	225	236	247
46	161	172	184	195	207	218	230	241	253
47	164	176	188	200	211	223	235	247	258
48	168	180	192	204	216	227	240	252	264
49	171	184	196	208	220	232	245	257	269
50	175	187	200	212	225	237	250	262	275
51	178	191	204	217	229	242	255	268	280
52	181	195	208	221	234	246	260	274	286

PLANK MEASURE.

L. Ft.	3 by 23.	3 by 24.	3 by 25.	3 by 26.	3 by 27.	3 by 28.	3 by 29.	3 by 30.	3½ by 15.
24	138	144	150	156	162	168	174	180	105
25	144	150	156	162	169	175	181	187	109
26	149	156	162	169	175	182	188	195	114
27	155	162	169	175	182	189	196	203	118
28	161	168	175	182	189	196	203	210	122
29	167	174	181	188	196	203	210	217	127
30	172	180	187	195	202	210	217	225	131
31	178	186	194	201	209	277	225	232	136
32	184	192	200	208	216	224	232	240	140
33	190	198	206	214	223	231	239	247	144
34	195	204	212	221	225	238	246	255	149
35	201	210	219	227	236	245	254	262	153
36	207	216	225	234	243	252	261	270	157
37	213	222	231	240	250	259	268	277	162
38	218	228	237	247	256	266	275	285	166
39	224	234	244	253	263	273	283	292	171
40	230	240	250	260	270	280	290	300	175
41	236	246	256	266	277	287	297	307	179
42	241	252	262	273	283	294	304	315	184
43	247	258	269	279	290	301	312	322	188
44	253	264	275	286	297	308	319	330	192
45	259	270	281	292	304	315	326	337	197
46	264	276	287	299	310	322	333	345	201
47	270	282	294	305	317	329	341	352	206
48	276	288	300	312	324	336	348	360	210
49	282	294	306	318	331	343	355	367	214
50	287	300	312	325	337	350	362	375	219
51	293	306	319	331	344	357	370	382	223
52	299	312	325	338	351	364	377	390	227

PLANK MEASURE.

L. Ft.	3½ by 16	3½ by 17	3½ by 18	3½ by 19	3½ by 20	3½ by 21	3½ by 22	3½ by 23	3½ by 24
24	112	119	126	133	140	147	154	161	168
25	117	124	131	139	146	153	160	168	175
26	121	129	136	144	152	159	167	174	182
27	126	134	142	150	157	165	173	181	189
28	131	139	147	155	163	172	180	188	196
29	135	144	152	161	169	178	186	195	203
30	140	149	157	167	175	184	192	201	210
31	145	154	163	172	181	190	199	208	217
32	149	159	168	177	187	196	205	215	224
33	154	164	173	183	192	202	212	221	231
34	159	169	178	188	195	208	218	228	238
35	163	174	184	194	204	214	225	235	245
36	168	178	189	200	210	221	231	241	252
37	173	183	194	205	216	227	237	248	259
38	177	188	199	211	222	233	244	255	266
39	182	193	205	216	227	239	250	262	273
40	186	198	210	222	233	245	257	268	280
41	191	203	215	227	239	251	263	275	287
42	196	208	220	233	245	257	269	282	294
43	200	213	226	238	251	263	276	288	301
44	205	218	231	244	257	269	282	295	308
45	210	223	236	249	262	275	289	302	315
46	214	228	242	255	268	281	295	309	322
47	219	233	247	260	274	287	302	315	329
48	224	238	252	266	280	294	308	322	336
49	228	243	257	271	286	300	314	329	343
50	233	248	262	277	292	306	321	336	350
51	238	253	268	282	296	312	327	342	357
52	242	258	273	288	303	318	334	348	364

PLANK MEASURE.

L. Ft.	3½ by 25.	3½ by 26.	3½ by 27.	3½ by 28.	3½ by 29.	3½ by 30.	4 by 15.	4 by 16.	4 by 17.
24	175	182	189	196	203	210	120	128	136
25	182	190	197	204	211	219	125	133	142
26	190	197	205	212	220	227	130	139	147
27	197	205	213	220	228	236	135	144	153
28	204	212	220	229	237	245	140	149	159
29	211	220	228	237	245	254	145	155	164
30	219	227	236	245	254	263	150	160	170
31	226	235	244	253	262	271	155	165	176
32	233	243	252	261	271	280	160	171	181
33	241	250	260	269	279	289	165	176	187
34	248	258	268	278	287	297	170	181	193
35	255	265	276	286	296	306	175	187	198
36	262	273	283	294	304	315	180	192	204
37	269	281	291	302	313	324	185	197	210
38	277	288	299	310	321	332	190	203	215
39	284	296	307	318	330	341	195	208	221
40	292	303	315	327	338	350	200	213	227
41	299	311	323	335	346	359	205	219	232
42	306	318	331	343	355	367	210	224	238
43	313	326	339	351	363	376	215	229	244
44	320	333	346	359	372	385	220	235	249
45	328	341	354	367	381	394	225	240	255
46	335	349	362	376	389	402	230	245	261
47	342	356	370	384	397	411	235	251	266
48	350	364	378	392	406	420	240	256	272
49	356	372	386	400	414	429	245	261	278
50	365	379	394	408	423	437	250	267	283
51	372	387	402	416	431	446	255	272	289
52	379	394	409	424	440	454	260	278	294

PLANK MEASURE.

L. Ft.	4 by 18	4 by 19	4 by 20	4 by 21	4 by 22	4 by 23	4 by 24	4 by 25	4 by 26
24	144	152	160	168	176	184	192	200	208
25	150	158	167	175	183	192	200	208	217
26	156	165	173	182	191	199	208	217	225
27	162	171	180	189	198	207	216	225	234
28	168	177	187	196	205	215	224	233	243
29	174	184	193	203	213	222	232	242	251
30	180	190	200	210	220	230	240	250	260
31	186	196	207	217	227	238	248	258	269
32	192	203	213	224	235	245	256	267	277
33	198	209	220	231	242	253	264	275	286
34	204	215	227	238	249	261	272	283	295
35	210	222	233	245	257	268	280	291	303
36	216	228	240	252	264	276	288	300	312
37	222	234	247	259	271	284	296	308	321
38	228	241	253	266	279	291	304	317	329
39	234	247	260	273	286	299	312	325	338
40	240	253	267	280	293	307	320	333	347
41	246	260	273	287	301	314	328	342	355
42	252	266	280	294	308	322	336	350	364
43	258	272	287	301	315	330	344	358	373
44	264	279	293	308	323	337	352	367	381
45	270	285	300	315	330	345	360	375	390
46	276	291	307	322	337	353	368	383	399
47	282	298	313	329	345	360	376	392	407
48	288	304	320	336	352	368	384	400	416
49	294	310	327	343	359	376	392	408	425
50	300	317	333	350	367	383	400	417	433
51	306	323	340	357	374	391	408	425	442
52	312	329	346	364	381	399	416	434	450

TABLE IV.

SQUARE TIMBER.

EXPLANATION.

The length of any stick of hewed or sawed timber will be found in the left-hand column of the table; the side dimensions at the head of the page, and the cubical, or solid contents, may be found directly under the side dimensions, and at the right of the length. Thus, a stick of timber (page 44,) measuring 10 by 12 inches, side dimensions and 30 feet in length, contains 25 cubic feet of timber. So also, a stick 20 by 22 inches, side dimensions, and 35 feet long, contains 107 cubic feet.

If a piece of timber should exceed, in length, any provision made in these tables, its contents may be found by taking twice what is shown for half its length, &c. Thus, a stick of timber 64 feet long would contain twice what is shown in the table for one 32 feet long, and so on.

When a stick of timber is larger at one end than at the other, the mean diameter, or square, must be sought for, and its contents computed from it.

In these computations, the decimal parts of a foot are omitted, when half or less than half a foot; and when more, they are reckoned as a whole foot. This will be sufficiently correct for all ordinary purposes.

CUBICAL CONTENTS OF SQUARE TIMBER.

L. Ft.	6 by 6.	6 by 7.	6 by 8.	6 by 9.	6 by 10.	6 by 11.	6 by 12.
20	5.00	5.83	6.66	7.50	8.33	9.77	10.00
21	5.25	6.12	7.00	7.87	8.75	9.62	10.50
22	5.50	6.42	7.33	8.25	9.16	10.08	11.00
23	5.75	6.70	7.66	8.62	9.58	10.54	11.50
24	6.00	7.00	8.00	9.00	10.00	11.00	12.00
25	6.25	7.29	8.33	9.37	10.42	11.46	12.50
26	6.50	7.58	8.66	9.75	10.83	11.02	13.00
27	6.75	7.87	9.00	10.12	11.25	12.37	13.50
28	7.00	8.16	9.33	10.50	11.66	12.83	14.00
29	7.25	8.45	9·66	10.87	12.08	13.29	14.50
30	7.50	8.75	10.00	11.25	12.50	13.75	15.00
31	7.75	9.04	10.33	11.62	12.92	14.21	15.50
32	8.00	9.33	10.66	12.00	13.33	14.66	16.00
33	8.25	9.62	11.00	12.37	13.75	15.12	16.50
34	8.50	9.91	11.33	12.75	14.17	15.59	17.00
35	8.75	10.20	11.66	13.12	14.58	16.04	17.50
36	9.00	10.50	12.00	13.50	15.00	16.50	18.00
37	9.25	10.79	12.33	13.87	15.42	16.96	18.50
38	9.50	11.08	12.66	14.25	15.83	17.41	19.00
39	9.75	11.37	13.00	14.62	16.25	17.87	19.50
40	10.00	11.66	13.33	15.00	16.66	18.33	20.00
41	10.25	11.95	13.66	15.37	17.08	18.79	20.50
42	10.50	12.25	14.00	15.75	17.50	19.25	21.00
43	10.75	12.54	14.33	16.12	17.92	19.71	21.50
44	11.00	12.83	14.66	16.50	18.33	20.16	22.00
45	11.25	13.12	15.00	16.87	18.75	20.62	22.50
46	11.50	13.41	15.33	17.25	19.17	21.08	23.00
47	11.75	13.70	15.66	17.62	19.58	21.54	23.50
48	12.00	14.00	16.00	18.00	20.00	22.00	24.00

CUBICAL CONTENTS OF SQUARE TIMBER.

L. Ft.	7 by 7.	7 by 8.	7 by 9.	7 by 10.	7 by 11.	7 by 12.	8 by 8.
20	6.80	7.77	8.75	9.72	10.69	11.66	8.88
21	7.14	8.16	9.18	10.20	11.23	12.25	9.33
22	7.48	8.55	9.62	10.69	11.76	12.83	9.77
23	7.82	8.94	10.06	11.18	12.29	13.41	10.22
24	8.16	9.33	10.50	11.66	12.83	14.00	10.66
25	8.50	9.72	10.93	12.15	13.37	14.58	11.11
26	8.84	10.11	11.37	12.64	13.90	15.16	11.55
27	9.18	10.50	11.81	13.12	14.44	15.75	12.00
28	9.52	10.88	12.25	13.61	14.94	16.33	12.44
29	9.87	11.27	12.68	14.09	15.50	16.91	12.88
30	10.20	11.66	13.12	14.58	16.04	17.50	13.33
31	10.54	12.05	13.56	15.07	16.57	17.58	13.77
32	10.89	12.44	14.00	15.55	17.11	18.66	14.22
33	11.23	12.83	14.43	16.04	17.64	19.25	14.66
34	11.57	13.22	14.87	16.52	18.18	19.83	15.11
35	11.91	13.61	15.31	17.01	18.71	20.41	15.55
36	12.25	14.00	15.75	17.50	19.25	21.00	16.00
37	12.59	14.39	16.18	17.98	19.78	21.58	16.44
38	12.93	14.77	16.62	18.47	20.32	22.16	16.88
39	13.27	15.16	17.06	18.96	20.85	22.75	17.33
40	13.61	15.55	17.50	19.44	21.39	23.33	17.77
41	13.95	15.94	17.93	19.93	21.87	23.91	18.22
42	14.29	16.33	18.37	20.41	22.46	24.50	18.66
43	14.63	16.72	18.81	20.90	22.99	25.08	19.11
44	14.97	17.11	19.25	21.38	23.52	25.66	19.55
45	15.31	17.50	19.68	21.87	24.06	26.25	20.00
46	15.65	17.89	20.12	22.36	24.59	26.83	20.44
47	16.00	18.27	20.56	22.84	25.13	27.41	20.88
48	16.33	18.66	21.00	23.33	25.66	28.00	21.33

CUBICAL CONTENTS OF SQUARE TIMBER.

L. Ft.	8 by 9.	8 by 10.	8 by 11.	8 by 12.	9 by 9.	9 by 10.	9 by 11.	9 by 12.
20	10.00	11.11	12.22	13.33	11.25	12.50	13.75	15.00
21	10.50	11.66	12.83	14.00	11.81	13.12	14.44	15.75
22	11.00	12.22	13.44	14.66	12.37	13.75	15.12	16.50
23	11.50	12.77	14.05	15.33	12.93	14.37	15.81	17.25
24	12.00	13.33	14.66	16.00	13.50	15.00	16.50	18.00
25	12.50	13.88	15.27	16.66	14.06	15.62	17.18	18.75
26	13.00	14.44	15.88	17.33	14.62	16.25	17.87	19 50
27	13.50	15.00	16.50	18.00	15.18	16.87	18.56	20.25
28	14.00	15.55	17.11	18.66	15.75	17.50	19.25	21.00
29	14.50	16.11	17.72	19.33	16.31	18.12	19.93	21.75
30	15.00	16.66	18.33	20.00	16.87	18.75	20.62	22.50
31	15.50	17.22	18.94	20.66	17.43	19.37	21.31	23.25
32	16.00	17.77	19.55	21.33	18.00	20.00	22.00	24.00
33	16.50	18.33	20.16	22.00	18.56	20.62	22·68	24.75
34	17.00	18.88	20.77	22.66	19.12	21.25	23.37	25.55
35	17.50	19.44	21.39	23.33	19.68	21.87	24.06	26.25
36	18.00	20.00	22.00	24.00	20.25	22.50	24.75	27.00
37	18.50	20.55	22.61	24.66	20.81	23.12	25.43	27.75
38	19.00	21.11	23.22	25.33	21.37	23.75	26.12	28.50
39	19.50	21.66	23.83	26.00	21.93	24.37	26.81	29.25
40	20.00	22.22	24.44	26.66	22.50	25.00	27.50	30.00
41	20.50	22.77	25.05	27.33	23.06	25.62	28.18	30.75
42	21.00	23.33	25.66	28.00	23.62	26.25	28.87	31.50
43	21.50	23.88	26.27	28.66	24.18	26.87	29.56	32.25
44	22.00	24.44	26.88	29.33	24.75	27.50	30.25	33.00
45	22.50	25.00	27.50	30.00	25.31	28.12	30.93	33.75
46	23.00	25.55	28.11	30.66	25.87	28.75	31.62	34.50
47	23.50	26.10	28.71	31.33	26.43	29.37	32.31	35.25
48	24.00	26.66	29.33	32.00	27.00	30.00	33.00	36.00

CUBICAL CONTENTS OF SQUARE TIMBER.

L. Ft.	10 by 10.	10 by 11.	10 by 12.	10 by 13.	11 by 11.	11 by 12.	11 by 13.	11 by 14.	12 by 12.
20	14	15	17	18	17	18	20	21	20
21	15	16	17	19	18	19	21	22	21
22	15	17	18	20	18	20	22	23	22
23	16	18	19	21	19	21	23	25	23
24	17	18	20	22	20	22	24	26	24
25	17	19	21	23	21	23	25	27	25
26	18	20	22	23	22	24	26	28	26
27	19	21	22	24	23	25	27	29	27
28	19	21	23	25	23	26	28	30	28
29	20	22	24	26	24	27	29	31	29
30	21	23	25	27	25	28	30	32	30
31	21	24	26	28	26	28	31	33	31
32	22	24	27	29	27	29	32	34	32
33	23	25	28	30	28	30	33	35	33
34	24	26	28	31	29	31	34	36	34
35	24	27	29	32	29	32	35	37	35
36	25	27	30	32	30	33	36	38	36
37	26	28	31	33	31	34	37	40	37
38	26	29	32	34	32	35	38	41	38
39	27	30	32	35	33	36	39	42	39
40	28	31	33	36	34	37	40	43	40
41	28	31	34	37	34	38	41	44	41
42	29	32	35	38	35	38	42	45	42
43	30	33	36	39	36	39	43	46	43
44	31	34	37	40	37	40	44	47	44
45	31	34	37	41	38	41	45	48	45
46	32	35	38	41	39	42	46	49	46
47	33	36	39	42	39	43	47	50	47
48	33	37	40	43	40	44	48	51	48

CUBICAL CONTENTS OF SQUARE TIMBER.

L. Ft.	12 by 13.	12 by 14.	12 by 15.	13 by 13.	13 by 14.	13 by 15.	13 by 16.	14 by 14.	14 by 15.
20	22	23	25	23	25	27	29	27	29
21	23	24	26	25	27	28	30	29	31
22	24	26	27	26	28	30	32	30	32
23	25	27	29	27	29	31	33	31	34
24	26	28	30	28	30	32	35	33	35
25	27	29	31	29	32	34	36	34	36
26	28	30	32	30	33	35	38	35	38
27	29	31	34	32	34	37	39	37	39
28	30	32	35	33	35	38	40	38	41
29	31	34	36	34	37	39	42	39	42
30	32	35	37	35	38	41	43	41	44
31	34	36	39	36	39	34	45	42	45
32	35	37	40	38	40	43	46	44	47
33	36	38	41	39	42	45	48	45	48
34	37	40	42	40	43	46	49	46	50
35	38	41	44	41	44	47	51	48	51
36	39	42	45	42	45	49	52	49	53
37	40	43	46	43	47	50	53	50	54
38	41	44	47	45	48	51	55	52	55
39	42	45	49	46	49	53	56	53	57
40	43	47	50	47	51	54	58	54	58
41	44	48	51	48	52	55	59	56	60
42	45	49	52	49	53	57	61	57	61
43	46	50	54	50	54	58	62	58	63
44	48	51	55	52	56	60	64	60	64
45	49	52	56	53	57	61	65	61	66
46	50	54	57	54	58	62	66	63	67
47	51	55	58	55	59	64	68	64	69
48	52	56	60	56	61	65	69	65	70

CUBICAL CONTENTS OF SQUARE TIMBER.

L. Ft.	14 by 16.	14 by 17.	15 by 15.	15 by 16.	15 by 17.	15 by 18.	16 by 16.	16 by 17.	16 by 18.
20	31	33	31	33	35	37	36	38	40
21	33	35	33	35	37	39	37	40	42
22	34	36	34	37	39	41	39	42	44
23	36	38	36	38	41	43	41	43	46
24	37	40	37	40	42	45	43	45	48
25	39	41	39	42	44	47	44	47	50
26	40	43	41	43	46	49	46	49	52
27	42	45	42	45	48	51	48	51	54
28	44	46	44	47	50	52	50	53	56
29	45	58	45	48	51	54	52	55	58
30	47	50	47	50	53	56	53	57	60
31	48	51	48	52	55	58	55	59	62
32	50	53	50	53	57	60	57	60	64
33	51	55	52	55	58	62	59	62	66
34	53	56	53	57	60	64	60	64	68
35	54	58	55	58	62	66	62	66	70
36	56	59	56	60	64	67	64	68	72
37	58	61	58	62	65	69	66	70	74
38	59	63	59	63	67	71	68	72	76
39	61	64	61	65	69	73	69	74	78
40	62	66	62	67	71	75	71	76	80
41	64	68	64	68	73	77	73	77	82
42	65	69	66	70	74	79	75	79	84
43	67	71	67	72	76	81	76	81	86
44	68	73	69	73	78	82	78	83	88
45	70	74	70	75	80	84	80	85	90
46	72	76	72	77	81	86	82	87	92
47	73	78	73	78	83	88	84	89	94
48	75	79	74	80	85	90	85	91	96

CUBICAL CONTENTS OF SQUARE TIMBER.

L. Ft.	16 by 19.	17 by 17.	17 by 18.	17 by 19.	17 by 20.	18 by 18.	18 by 19.	18 by 20.	18 by 21.
20	42	40	42	45	47	45	47	50	52
21	44	42	45	47	50	47	50	52	55
22	46	44	47	49	52	49	52	55	58
23	49	46	49	52	54	52	55	57	60
24	51	48	51	54	57	54	57	60	63
25	53	50	53	56	59	56	59	62	66
26	55	52	55	58	61	58	62	65	68
27	57	54	57	61	64	61	64	67	71
28	59	56	59	63	66	63	66	70	73
29	61	58	62	65	68	65	69	72	76
30	63	60	64	67	71	67	71	75	79
31	65	62	66	70	73	70	74	77	81
32	68	64	68	72	76	72	76	80	84
33	70	66	70	74	78	74	78	82	87
34	72	68	72	76	80	76	81	85	89
35	74	70	74	79	83	79	83	87	92
36	76	72	76	81	85	81	85	90	94
37	78	74	79	83	87	83	88	92	97
38	80	76	81	85	90	85	90	95	100
39	82	78	83	88	92	88	93	97	102
40	84	80	85	90	94	90	95	100	105
41	87	82	87	92	97	92	97	102	108
42	89	84	89	94	99	94	100	105	110
43	91	86	91	97	101	97	102	107	113
44	93	88	93	99	103	99	104	110	115
45	95	90	96	101	106	101	107	112	118
46	97	92	98	104	109	104	109	115	121
47	99	94	100	105	111	106	112	117	123
48	101	96	102	108	113	108	114	120	126

CUBICAL CONTENTS OF SQUARE TIMBER.

L. Ft.	19 by 19.	19 by 20.	19 by 21.	19 by 22.	20 by 20.	20 by 21.	20 by 22.	20 by 23.	21 by 21.
20	50	53	55	58	56	58	61	63	61
21	53	55	58	61	58	61	64	67	64
22	55	58	61	64	61	64	67	70	67
23	58	61	64	67	64	67	70	73	70
24	60	63	66	70	67	70	73	76	73
25	63	66	69	73	69	73	76	78	77
26	65	69	72	76	72	76	79	83	80
27	68	71	75	78	75	79	82	86	83
28	70	74	78	81	78	82	86	89	86
29	73	76	80	84	81	85	89	92	89
30	75	79	83	87	83	87	92	95	92
31	78	82	86	90	86	90	95	98	95
32	80	84	89	93	89	93	98	101	98
33	83	87	91	96	92	96	101	104	101
34	85	90	94	99	94	99	104	108	104
35	88	92	97	102	97	102	107	111	107
36	90	95	100	104	100	105	110	115	110
37	93	98	103	107	103	106	113	118	113
38	95	100	105	110	106	111	116	121	116
39	98	103	108	113	108	114	119	124	119
40	100	106	111	116	111	117	122	127	122
41	103	108	114	119	114	120	125	130	126
42	105	111	116	122	117	122	128	134	129
43	108	113	119	125	119	125	132	137	132
44	110	116	122	128	122	128	135	140	135
45	113	119	125	131	125	131	138	143	138
46	115	121	128	134	128	134	140	146	141
47	118	124	130	136	131	137	144	150	144
48	120	127	133	139	133	140	147	153	147

CUBICAL CONTENTS OF SQUARE TIMBER.

L. Ft.	21 by 22.	21 by 23.	21 by 24.	22 by 22.	22 by 23.	22 by 24.	22 by 25.	23 by 23.	23 by 24.
20	64	67	70	67	70	73	76	73	76
21	67	70	73	70	73	77	80	77	80
22	71	73	77	73	77	80	84	80	84
23	74	77	80	77	80	84	87	84	88
24	77	80	84	80	84	88	91	88	92
25	80	83	87	83	87	91	95	91	95
26	83	87	91	87	91	95	99	95	99
27	87	90	94	90	94	99	103	99	103
28	90	93	98	93	98	102	106	102	107
29	93	97	101	97	101	106	110	106	111
30	96	100	105	100	105	110	114	110	115
31	99	103	108	103	108	113	118	113	118
32	103	107	112	107	112	117	122	117	122
33	106	110	115	110	115	121	126	121	126
34	109	114	119	114	119	124	129	124	130
35	112	117	122	117	122	128	133	128	134
36	115	120	126	121	126	132	137	132	138
37	119	124	129	124	130	135	141	135	141
38	122	127	133	127	133	139	145	139	145
39	125	130	136	131	137	143	148	143	149
40	128	134	140	134	140	146	152	146	153
41	131	137	143	137	144	150	156	150	157
42	134	140	147	141	147	154	160	154	161
43	138	144	150	144	151	157	164	157	164
44	141	147	154	147	154	161	168	161	168
45	144	150	157	151	158	165	171	165	172
46	148	154	161	154	161	168	175	168	176
47	151	157	164	157	163	172	179	172	180
48	154	161	168	161	165	176	183	176	184

CUBICAL CONTENTS OF SQUARE TIMBER.

L. Ft.	23 by 25.	24 by 24.	24 by 25.	24 by 26.	24 by 27.	25 by 25.	25 by 26.	25 by 27.	25 by 28.
20	79	80	83	86	90	86	90	93	97
21	83	84	87	91	94	91	94	98	102
22	87	88	91	95	99	95	99	103	106
23	91	92	95	99	103	99	103	107	111
24	95	96	100	104	108	104	108	112	116
25	99	100	104	108	112	108	112	117	121
26	103	104	108	112	117	112	117	121	126
27	107	108	112	117	121	117	121	126	131
28	111	112	116	121	126	121	126	131	136
29	115	116	120	125	130	125	130	135	140
30	119	120	125	130	135	130	135	140	145
31	123	124	129	134	139	134	139	145	150
32	127	128	133	138	144	138	144	150	155
33	131	132	137	143	148	143	148	154	160
34	135	136	141	147	153	147	153	159	165
35	139	140	145	151	157	151	157	164	170
36	143	144	150	156	162	156	162	168	175
37	147	148	154	160	166	160	167	173	179
38	151	152	158	164	171	164	171	178	184
39	155	156	162	169	175	169	176	182	189
40	159	160	166	173	180	173	180	187	194
41	163	164	170	177	184	177	185	192	199
42	167	168	175	182	189	182	189	196	204
43	171	172	179	186	193	186	194	201	209
44	175	176	183	190	198	190	198	206	213
45	179	180	187	195	202	195	203	210	218
46	183	184	191	199	207	199	207	215	223
47	187	188	195	203	211	204	212	220	228
48	191	192	200	208	216	208	216	225	233

TABLE V.

Explanation.—The length of any log, in feet, will be found in the left-hand column of the table, and the *average diameter*, in inches, may be found at the head of the page. Thus, a log 19 inches diameter, and 38 feet long, contains 48 feet and six-twelfths, cubic measurement.

REMARKS.

These tables have been computed from the following **Rule.**—*Add together the two extreme diameters, and divide by two for the mean diameter. Subtract one-third for the side of the square the log will make when hewn. Square the side thus obtained, and multiply the product by the length of the log in feet, and divide the last product by 144, (or by 12 twice,) the quotient will be the cubical contents in feet, and twelfths of a foot.*

This rule, after much consultation with both buyer and seller of lumber, is, I believe, more nearly the truth than any other that can be made, and this is conceded by all *sellers* of lumber with whom I have conversed;—besides, it has attained almost universal use in practice. This rule does not give quite so much as the square *inscribed* in a circle equal to the diameter of the log, but as trees never grow perfectly round nor straight, some waste will be experienced, and allowance ought justly to be made to the purchaser, from the mathematical accuracy of inscribing a square in a circle. The average diameter may also be taken in sections of fifteen feet, or by the rule above, as the parties may agree.

As the above rule corresponds with universal practice, these tables may, with propriety, be regarded as the *Standard Tables* for reducing round timber to square, cubical measurement.

Example.—Suppose the adjoining diagram to represent a log, whose extreme diameters are 18 and 24 inches, and 45 feet long—how many cubic feet does it contain?

Length 45 feet.

OPERATION.

18+24—42; and 42÷2—21 inches, average diameter.

⅓ of 21—7. Then, 21—7—14, and $\overline{14^2}$—196;

196×45÷144—61 ft. 3 in. *Ans.*

ROUND TIMBER REDUCED TO SQUARE TIMBER.

CUBIC MEASUREMENT.

L. Ft.	Av. Diam. 12.	Av. Diam. 13.	Av. Diam. 14.	Av. Diam. 15.	Av. Diam. 16.	Av. Diam. 17.	Av. Diam. 18.	Av. Diam. 19.
25	11.1	14.1	15.1	17.4	19.10	22.6	25.0	28.0
26	11.6	14.8	15.8	18.1	20.8	23.0	26.0	29.1
27	12.	15.2	16.3	18.9	21.5	23.11	27.0	30.2
28	12.5	15.9	16.10	19.5	22.3	24.10	28.0	31.4
29	12.10	16.4	17.5	20.2	23.0	25.9	29.0	32.5
30	13.3	16.11	18.	20.10	23.10	26.8	30.0	33.6
31	13.8	17.5	18.7	21.6	24.7	27.7	31.0	34.8
32	14.2	18.0	19.2	22.3	25.5	28.6	32.0	35.9
33	14.7	18.7	19.9	22.11	26.2	29.5	33.0	36.11
34	15.	19.2	20.4	23.7	27.0	30.4	34.0	38.0
35	15.6	19.8	20.11	24.4	27.9	31.3	35.0	40.2
36	15.11	20.3	21.6	25.0	28.7	32.2	36.0	41.3
37	16.4	20.10	22.1	25.8	29.5	33.1	37.0	42.5
38	16.10	21.5	22.8	26.5	30.2	34.0	38.0	43.6
39	17.4	21.11	23.4	27.1	31.10	34.11	39.0	44.7
40	17.9	22.6	24.0	27.9	31.9	35.10	40.0	45.9
41	18.3	23.1	24.7	28·6	32.7	36.9	41.0	46.10
42	18.8	23.8	25.2	29.2	33.4	37.8	42.0	48.0
43	19.1	24.2	25.9	29.10	34.2	38.7	43.0	49.1
44	19.7	24.9	26.4	30.7	34.11	39.6	44.0	50.3
45	20.	25.4	27.0	31.3	35.9	40.5	45.0	51.4
46	20.5	25.11	27.7	31.11	36.6	41.4	46.0	52.6
47	20.11	26.5	28.2	32.8	37.4	42.3	47.0	53.7
48	21.4	27.	28.9	33.4	38.1	43.2	48.0	54.9
49	21.9	27.7	29.4	34.0	38.11	44.1	49.0	55.10
50	22.2	28.2	30.0	34.8	39.8	45.	50.0	56.0

NOTE.—The Diameter multiplied by ·7071, gives the side of the square any round log will make when squared.

ROUND TIMBER REDUCED TO SQUARE TIMBER.

CUBIC MEASUREMENT.

L. Ft.	Av. Diam. 20.	Av. Diam. 21.	Av. Diam. 22.	Av. Diam. 23.	Av. Dia. 24.	Av. Dia. 25.	Av. Diam. 26.	Av. Diam. 27.
25	31.8	34.0	39.1	41.9	44.5	50.2	53.2	56.3
26	32.11	35.5	40.8	43.5	46.2	52.2	55.4	58.6
27	34.2	36.9	42.2	45.1	48.0	54.2	57.5	60.9
28	35.5	38.1	43.9	46.9	49.8	56.2	59.7	63.0
29	36.8	39.6	45.4	48.5	50.4	58.2	61.8	65.3
30	38.0	40.10	46.11	50.1	52.1	60.3	63.10	67.6
31	39.3	42.2	48.5	51.9	54.0	62.3	65.11	69.9
32	40.6	43.7	50.0	53.5	55.9	64.3	68.1	72.0
33	41.9	44.11	51.7	55.1	57.6	66.3	70.2	74.3
34	43.0	46.3	53.2	56.9	59.3	68.3	72.4	76.6
35	44.4	47.8	54.8	58.5	61.1	70.3	74.5	78.9
36	45.7	49.0	56.3	60.1	62.9	72.3	76.7	81.0
37	46.10	50.4	57.10	61.9	64.6	74.3	78.8	83.3
38	47.1	51.9	59.5	63.5	66.3	74.3	80.10	85.6
39	49.4	53.1	60.11	64.1	68.0	76.3	82.11	87.9
40	50.8	54.5	62.6	66.9	69.9	78.3	85.1	90.0
41	51.11	55.10	64.1	68.5	71.6	80.3	87.2	92.3
42	53.2	57.2	65.8	70.1	73.3	82.4	89.4	94.6
43	54.5	58.6	67.2	71.9	75.0	84.4	91.5	96.9
44	55.8	59.11	68.9	73.5	77.9	86.4	93.8	99.0
45	56.11	61.3	70.4	75.1	79.6	88.4	95.8	101.3
46	58.3	62.7	71.11	76.9	81.3	90.4	97.10	103.6
47	59.6	64.0	73·5	78.5	83.0	92.4	99.11	105.9
48	60.9	65.4	75.0	80.1	84.9	94.4	102.1	108.0
49	62.0	66.8	76.7	81.9	86.6	96.4	104.3	110.3
50	63.3	68.1	78.2	83.5	88.3	98.4	106.4	112.6

ROUND TIMBER REDUCED TO SQUARE TIMBER.

CUBIC MEASUREMENT.

L. Ft.	Av. Diam. 28.	Av. Diam. 29.	Av. Diam. 30.	Av. Diam. 31.	Av. Diam. 32.	Av. Diam. 33.	Av. Diam. 34.
25	62.8	66.8	69.5	73.0	78.9	84.0	88.0
26	65.2	69.4	72.3	75.11	81.11	87.5	91.5
27	67.8	72.0	75.0	78.10	85.1	90.9	95.0
28	70.2	74.8	77.9	81.9	88.3	94.1	98.5
29	72.8	77.4	80.7	84.8	91.5	97.6	102.0
30	75.3	80.0	83.4	87.7	94.7	100.0	105.6
31	77.9	82.8	86.1	90.6	97.9	104.2	109.0
32	80.3	85.4	88.11	93.5	100.11	107.7	112.6
33	82.9	88.0	91.8	96.4	104.1	111.0	116.0
34	85.3	90.8	94.5	99.3	107.3	114.3	119.6
35	87.9	93.4	97.3	102.2	110.5	117.8	123.1
36	90.3	96.0	100.0	105.1	113.7	121.0	126.7
37	92.9	98.8	102·9	108.0	116.9	124.4	130.1
38	95.3	101.4	105.7	110.11	119.11	127.9	133.7
39	97.9	104.0	108.4	113.10	123.1	131.1	137.1
40	100.3	106.8	111·1	116.9	126.3	134.5	140.8
41	102.9	109.4	113.11	119.8	129.5	138.0	144.2
42	105.4	112.0	116.8	122.7	132.7	141.2	147.8
43	107.10	114.8	119.5	125.6	135.9	144.6	151.2
44	110.4	117.4	122.3	128.5	138.11	148.0	154.8
45	112.10	120.0	125.0	131.4	142.1	151.3	158.2
46	115.4	122.8	127.9	134.3	145.3	154.7	161.9
47	117.10	125.4	130.7	137.2	148.5	158.0	165.3
48	120.4	128.0	133.4	140.1	151.7	161.4	168.9
49	123.10	130.8	136.1	143.0	154.9	164.8	172.3
50	125.4	133.4	138.11	145.11	157.10	168.1	175.9

ROUND TIMBER REDUCED TO SQUARE TIMBER.

CUBIC MEASUREMENT.

L. Ft.	Av. Diam. 35.	Av. Diam. 36.	Av. Diam. 37.	Av. Diam. 38.	Av. Diam. 39.	Av. Diam. 40.	Av. Diam. 41.
25	95.11	100.0	108.6	112.11	121.11	131.4	141.0
26	99.9	104.0	112.10	117.5	126.10	136.7	146.8
27	103.7	108.0	117.2	121.11	131.8	141.10	152.4
28	107.5	112.0	121.6	126.5	136.7	147.1	157.1
29	101.3	116.0	125.10	130.11	141.5	152.4	163.7
30	115.1	120.0	130.3	135.6	146.4	157.7	169.3
31	118.11	124.0	134.7	140.0	151.2	162.10	174.1
32	122.9	128.0	138.11	144.6	156.1	168.1	180.6
33	126.7	132.0	143.3	149.0	160.11	173.4	186.2
34	130.5	136.0	147.7	153.6	165.10	178.7	191.9
35	134.3	140.0	151.11	158.1	170.8	183.10	197.5
36	138.1	144.0	156.3	162.7	175.7	189.1	203.1
37	141 11	148.0	160.7	167.1	180.5	194.4	208.8
38	145.9	152.0	164.11	171.7	185.4	199.7	214.4
39	149.7	156.0	169.3	176.1	190.2	204.10	220:0
40	153.5	160.0	173.7	180.8	195.1	210.1	225.7
41	157.3	164.0	177.11	185.2	199.11	215.4	231.2
42	161.1	168.0	182.4	189.8	204.10	220.7	236.1
43	164.11	172.0	186.8	194.2	209.8	225.10	243.7
44	168.9	176.0	191.0	198.8	214.7	231.1	248.2
45	172.7	180.0	195.4	203.2	219.5	236.4	253.1
46	176.5	184.0	199.8	207.9	224.4	241.7	259.6
47	180.3	188.0	204.4	212.3	229.2	246.10	265.1
48	184.1	192.0	212.8	216.9	234.1	252.1	270.9
49	187.11	196.0	217.0	221.3	239.0	257.4	276.5
50	191.9	200.0	221.4	225.9	243.10	262.7	282.0

TABLE VI,

SHOWING THE CUBICAL CONTENTS OF SPARS, AND OTHER ROUND TIMBER.

EXPLANATION AND REMARKS.

THE length of any spar, or log, will be found in feet in the left-hand column of the table, and the *average diameter*, in *inches*, may be seen at the top of the page—advancing in size 1 inch, from 10 to 38 inches.

To find the cubic or solid contents which any spar or log, will give, take the length in feet in the left-hand column of the table, and the diameter in inches at the top of the page—trace the two lines until they meet, and you will have the amount sought for. Thus, a spar, or log, whose average diameter is 28 inches, and 36 feet in length, contains, according to our showing, 154 cubic feet; and one 34 inches diameter, and 28 feet long, 178. If a spar should exceed in length any provision made in these tables, (as will often be the case,) its contents may be found by taking twice what is shown for half its length. Thus, a log 68 feet long, and 26 inches diameter, would contain twice what is shown in the table for one 34 feet long: *i. e.* 252 feet. In these computations, the decimal parts of a foot are omitted, when half, or less than half; and when more, they are reckoned as a whole foot. This will be sufficiently correct for all ordinary purposes.

NOTE.—*In computing the solidity of spars, or logs, in rafts, for charging toll, about* 10 *per cent. from these estimates should be deducted for the sudden taper of many logs, as also for the inequality of the diameters of the same log, and the protruberances of the bark, where the average diameter is taken.*

CUBICAL CONTENTS OF ROUND TIMBER.

L. Ft.	Diam. 6.	Diam. 7.	Diam. 8.	Diam. 9.	Diam. 10.	Diam. 11.	Diam. 12.	Diam. 13.
8	1.57	2.14	2.79	3.53	4	5	6	7
9	1.76	2.40	3.14	3.97	5	6	7	8
10	1.96	2.67	3.49	4.42	5	7	8	9
11	2.16	2.94	3.84	4.86	6	7	8	10
12	2.35	3.20	4.19	5.30	6	8	9	11
13	2.55	3.47	4.54	5.74	7	9	10	12
14	2.75	3.74	4.89	6.19	7	9	11	13
15	2.94	4.05	5.24	6.63	8	10	12	14
16	3.14	4.27	5.58	7.07	9	11	12	14
17	3.33	4.54	5.93	7.51	9	11	13	16
18	3.53	4.81	6.28	7.95	10	12	14	16
19	3.73	5.07	6.63	8.39	10	13	15	17
20	3.92	5.34	6.98	8.84	11	13	16	18
21	4.12	5.61	7.33	9.28	11	14	16	19
22	4.32	5.88	7.67	9.72	12	15	17	20
23	4.51	6.14	8.03	10.16	12	16	18	21
24	4.70	6.41	8.37	10.60	13	16	19	22
25	4.90	6.68	8.72	11.05	14	17	20	23
26	5.10	6.94	9.07	11.49	14	17	20	24
27	5.29	7.21	9.42	11.93	15	18	21	25
28	5.49	7.48	9.77	12.37	15	18	22	26
29	5.68	7.74	10.12	12.81	16	19	23	27
30	5.88	8.01	10.47	13.26	16	20	24	28
31	6.08	8.28	10.82	13.70	17	20	24	29
32	6.27	8.54	11.17	14.13	17	21	25	29
33	6.48	8.82	11.52	14.58	18	22	26	30
34	6.67	9.08	11.86	15.02	19	22	27	31
35	6.87	9.35	12.21	15.47	19	23	28	32
36	7.05	9.62	12.56	15.90	20	24	28	33

CUBICAL CONTENTS OF ROUND TIMBER.

L. Ft.	Diam. 14.	Diam. 15.	Diam. 16.	Diam. 17.	Diam. 18.	Diam. 19.	Diam. 20.	Diam. 21.	Diam. 22.
8	8	10	11	12	14	16	17	19	21
9	9	11	12	14	16	18	20	22	24
10	10	12	14	16	18	20	22	24	26
11	12	13	15	17	19	22	24	26	29
12	13	15	17	19	21	24	26	29	32
13	14	16	18	20	23	26	28	31	34
14	15	17	19	22	25	28	31	34	37
15	16	18	21	23	26	30	33	36	40
16	17	20	22	25	28	32	35	38	42
17	18	21	24	27	30	33	37	41	45
18	19	22	25	28	32	35	39	43	48
19	21	23	27	30	33	37	41	45	50
20	21	25	28	31	35	39	44	48	53
21	22	26	29	33	37	41	46	50	55
22	23	27	31	35	39	43	48	53	58
23	24	28	32	36	41	45	50	55	61
24	26	30	34	38	42	47	52	58	63
25	27	31	35	39	44	49	54	60	66
26	28	32	36	41	46	51	57	63	69
27	29	33	38	42	48	53	59	65	71
28	30	35	39	44	49	55	61	67	74
29	31	36	41	45	51	57	63	70	77
30	32	37	42	47	53	59	65	72	79
31	33	38	43	48	55	61	68	75	82
32	34	40	45	50	57	63	70	77	85
33	35	41	46	52	58	65	72	79	87
34	36	42	48	53	60	67	74	82	90
35	37	43	49	55	62	69	76	84	93
36	39	44	50	57	64	71	79	86	95

CUBICAL CONTENTS OF ROUND TIMBER.

L. Ft.	Diam. 23	Diam. 24.	Diam. 25.	Diam. 26.	Diam. 27.	Diam. 28.	Diam. 29.	Diam. 30.
8	23	25	27	29	32	34	37	39
9	26	28	31	33	36	38	41	44
10	29	31	34	37	40	43	46	49
11	32	35	37	41	43	47	50	53
12	34	38	41	44	47	51	55	58
13	37	41	44	48	51	56	60	63
14	40	44	48	52	55	60	64	68
15	43	47	51	55	59	64	69	73
16	46	50	55	59	63	68	73	78
17	49	53	58	63	68	73	78	83
18	52	57	61	66	72	77	82	88
19	55	60	65	70	75	81	87	93
20	58	63	68	74	79	85	91	98
21	61	66	71	77	83	90	96	103
22	64	69	75	81	87	94	101	109
23	66	72	78	85	91	98	105	113
24	69	75	82	88	95	102	111	118
25	72	79	85	92	99	107	116	123
26	75	82	89	96	103	111	120	128
27	78	85	92	99	107	115	125	133
28	81	88	95	103	111	120	129	136
29	84	91	99	107	115	124	134	143
30	86	94	102	110	119	128	138	148
31	89	98	106	114	123	132	143	152
32	92	100	109	118	127	137	148	157
33	95	104	112	121	130	141	152	162
34	98	107	116	125	135	145	157	167
35	101	110	119	129	139	149	161	172
36	104	113	123	133	143	154	166	177

CUBICAL CONTENTS OF ROUND TIMBER.

L. Ft.	Diam. 30.	Diam. 32.	Diam. 33.	Diam. 34.	Diam. 35.	Diam. 36.	Diam. 37.	Diam. 38.
8	42	45	48	50	53	57	60	62
9	47	50	53	57	60	64	67	70
10	52	56	59	63	67	71	75	79
11	57	61	65	69	73	77	82	86
12	62	67	71	76	80	85	90	94
13	68	72	77	82	87	92	97	102
14	73	78	83	88	94	99	105	110
15	78	84	89	95	100	106	112	118
16	83	89	95	101	107	113	119	126
17	89	95	101	107	114	121	127	135
18	94	100	106	114	120	128	134	142
19	99	106	112	120	127	135	142	151
20	105	112	118	126	134	142	149	159
21	111	117	124	132	140	149	157	166
22	116	123	130	139	147	156	164	174
23	121	128	136	145	154	163	172	183
24	127	134	143	151	160	170	179	191
25	131	139	149	158	167	178	187	198
26	137	145	154	164	174	185	194	206
27	142	151	160	170	180	192	202	214
28	147	156	166	177	187	198	209	222
29	153	162	172	183	194	206	217	228
30	158	168	177	189	200	213	224	236
31	163	173	182	195	207	220	232	244
32	169	178	188	202	214	227	239	253
33	174	184	194	208	220	234	247	261
34	179	190	200	214	227	241	254	268
35	182	196	205	220	234	248	261	276
36	190	201	212	227	240	255	269	284

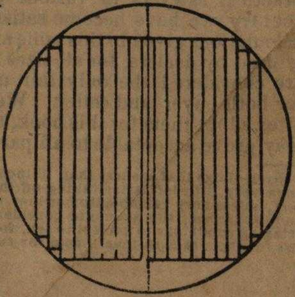
TABLE VII.

LOG MEASURE—DOYLE'S RULE.

EXPLANATION.

The length of the log, in feet, will be found in the left-hand column of the table, and the diameter at the top of the page. To find the number of feet of *square-edged* boards which a log will produce when sawed, take the length, in feet, in the left hand column of the table, and its diameter in inches, at the top of the page; trace the two columns of figures until they meet, and you will have the required amount.

Thus, a log which is 18 feet long, and 16 inches in diameter, gives at the right of the length, and directly under the diameter, 162 ft., while one 36 feet in length, and 18 inches diameter, gives 440 ft; fractions omitted.



REMARKS.

In former editions of this book the LOG TABLE was computed from accurately drawn diagrams as shown in the above cut, while there was no doubt that the calculations were *mathematically* correct, yet when *practically tested*, the result did not in all cases hold good, particularly when logs were not *straight* as nine tenths of them are not.

This gave rise to much dispute between buyer and seller, and we found the larger class of log buyers and lumber men often refused to adopt the measurement given in the tables of former editions, claiming that *Scribner* did not allow enough for slab, nor for saw kerf, two very important items where logs are bought for sawing into boards.

Hence after repeated correspondence and consultation with large lumber dealers and practical sawyers in various parts of the country, we have become satisfied that the calculations given in this table are universally used by dealers, for all sizes of logs, and are considered the only fair measurement for both buyer and seller. We shall hereafter adopt them for this book, trusting they may prove acceptable to all parties.

NOTE—Logs that are less than 10 inches in diameter have very little left after taking off the *slab* and *saw kerf*, unless very valuable timber they would be worth more for *wood*; this should be considered by farmers bringing small logs to market to sell, for they often get less for them as *logs*, than if sold for *fuel*.

LOG TABLE.

LOGS REDUCED TO INCH-BOARD MEASURE.

DOYLE'S RULE.

L. Ft.	Diam 10	Diam 11	Diam 12	Diam 13	Diam 14	Diam 15	Diam 16	Diam 17	Diam 18
10	23	31	40	50	62	75	90	105	122
11	25	34	44	55	69	83	99	116	135
12	27	37	48	61	75	91	108	126	147
13	29	40	52	66	81	98	117	137	159
14	32	43	56	71	88	106	126	148	171
15	34	46	60	76	94	113	135	158	184
16	36	49	64	81	100	121	144	169	196
17	38	52	68	86	106	128	153	179	208
18	41	55	72	91	112	136	162	190	220
19	43	58	76	96	119	143	171	201	232
20	46	61	80	101	125	151	180	211	244
21	48	64	84	106	131	158	189	222	257
22	50	67	88	111	137	166	198	232	269
23	52	70	92	116	144	174	207	243	281
24	54	74	96	122	150	181	216	254	294
25	56	77	100	127	156	189	225	264	306
26	59	80	104	132	163	196	234	274	318
27	61	83	108	137	169	204	243	285	330
28	63	86	112	142	175	212	252	296	342
29	65	89	116	147	182	219	261	306	355
30	68	92	120	152	188	226	270	316	368
31	70	95	124	157	193	234	279	327	380
32	72	98	128	162	200	242	288	338	392
33	74	101	132	167	206	249	297	348	404
34	77	104	136	172	212	256	306	358	416
35	79	107	140	177	219	265	315	369	428
36	81	110	144	182	224	272	324	380	440

LOG TABLE.

LOGS REDUCED TO INCH BOARD MEASURE.

DOYLE'S RULE.

L. Ft.	Diam 19	Diam 20	Diam 21	Diam 22	Diam 23	Diam. 24	Diam. 25	Diam 26
10	140	160	180	202	225	250	275	302
11	154	176	198	223	248	275	302	333
12	169	192	217	243	271	300	331	363
13	183	208	235	263	293	325	358	393
14	197	224	253	283	313	350	386	433
15	211	240	271	303	336	375	413	453
16	225	256	289	324	359	400	441	484
17	239	272	307	344	383	425	468	514
18	253	288	325	364	406	450	496	544
19	267	304	343	384	429	475	523	574
20	280	320	361	404	452	500	550	605
21	295	336	379	425	473	525	579	635
22	309	352	397	445	496	550	605	665
23	323	368	415	465	519	575	632	695
24	338	384	433	486	541	600	662	726
25	351	400	451	506	562	625	689	756
26	366	416	470	526	586	650	716	786
27	380	432	488	546	606	675	744	826
28	394	448	506	566	626	700	772	866
29	408	464	524	586	649	725	799	886
30	422	480	542	606	672	750	826	906
31	436	496	560	627	695	775	854	937
32	450	512	578	648	718	800	882	968
33	464	528	596	668	742	825	909	998
34	478	544	614	688	766	850	936	1028
35	492	560	632	708	789	875	964	1058
36	506	576	650	728	812	900	992	1088

LOG TABLE.

LOGS REDUCED TO INCH BOARD MEASURE.

DOYLE'S RULE.

L. Ft.	Diam 27	Diam 28	Diam 29	Diam 30	Diam 31	Diam. 32	Diam. 33	Diam. 34
10	330	360	391	422	456	490	526	562
11	363	396	430	465	502	539	578	619
12	397	432	469	507	547	588	631	675
13	430	468	508	549	592	637	684	731
14	463	504	547	591	638	686	736	787
15	496	540	586	633	683	735	789	844
16	530	576	625	676	729	784	842	900
17	563	612	664	718	774	833	895	956
18	596	648	703	761	820	882	946	1012
19	630	684	742	803	865	931	999	1069
20	661	720	782	845	912	980	1052	1125
21	693	756	820	887	957	1029	1103	1181
22	726	792	860	930	1004	1078	1156	1238
23	760	828	898	972	1049	1127	1209	1295
24	794	864	938	1014	1094	1176	1262	1350
25	827	900	977	1056	1139	1225	1315	1406
26	860	936	1016	1098	1184	1274	1368	1462
27	893	972	1055	1140	1230	1323	1420	1518
28	926	1008	1094	1182	1276	1372	1472	1574
29	959	1044	1133	1224	1321	1421	1525	1631
30	992	1080	1172	1266	1366	1470	1578	1688
31	1026	1116	1211	1309	1412	1519	1631	1744
32	1060	1152	1250	1352	1458	1568	1684	1800
33	1093	1188	1289	1394	1503	1617	1737	1856
34	1126	1224	1328	1436	1548	1666	1790	1912
35	1159	1260	1367	1479	1594	1715	1841	1968
36	1192	1296	1406	1522	1640	1764	1892	2024

LOG TABLE,

LOGS REDUCED TO INCH-BOARD MEASURE.

DOYLE'S RULE.

L. Ft.	Diam 35	Diam 36	Diam 37	Diam 38	Diam 39	Diam. 40	Diam. 41	Diam. 42
10	601	640	681	723	765	810	850	903
11	661	704	749	795	842	891	942	994
12	721	768	817	867	919	972	1027	1083
13	781	832	884	939	996	1053	1113	1173
14	841	896	953	1011	1070	1134	1198	1264
15	901	960	1021	1083	1149	1215	1284	1354
16	961	1024	1089	1156	1225	1296	1369	1444
17	1021	1088	1157	1228	1302	1377	1455	1534
18	1081	1152	1225	1300	1379	1458	1541	1625
19	1141	1216	1293	1372	1455	1539	1626	1715
20	1202	1280	1361	1446	1530	1620	1712	1805
21	1261	1344	1430	1518	1607	1701	1792	1896
22	1322	1408	1497	1590	1684	1782	1882	1986
23	1381	1472	1566	1662	1761	1863	1969	2077
24	1442	1536	1634	1734	1838	1944	2055	2166
25	1501	1600	1702	1806	1915	2025	2139	2256
26	1562	1664	1768	1878	1992	2106	2225	2346
27	1622	1728	1838	1950	2067	2187	2310	2437
28	1682	1792	1906	2022	2144	2268	2396	2527
29	1742	1856	1974	2095	2221	2349	2482	2617
30	1802	1920	2042	2166	2298	2430	2567	2708
31	1862	1984	2110	2239	2373	2511	2652	2798
32	1922	2048	2178	2312	2450	2592	2738	2888
33	1982	2112	2246	2383	2526	2673	2824	2979
34	2042	2176	2314	2456	2604	2754	2909	3069
35	2103	2240	2383	2529	2681	2835	2995	3159
36	2162	2304	2450	2600	2758	2916	3081	3250

LOG TABLE.

LOGS REDUCED TO INCH-BOARD MEASURE.

DOYLE'S RULE.

L. Ft.	Diam 43	Diam 44	Diam 45	Diam 46	Diam 47	Diam. 48	Diam. 49	Diam. 50
10	952	1000	1051	1103	1156	1210	1265	1322
11	1046	1100	1156	1213	1271	1331	1392	1455
12	1141	1200	1261	1323	1387	1452	1519	1587
13	1237	1300	1366	1434	1502	1573	1645	1719
14	1331	1400	1471	1544	1618	1694	1772	1850
15	1426	1500	1576	1654	1734	1815	1898	1984
16	1521	1600	1681	1764	1849	1936	2025	2116
17	1616	1700	1786	1874	1964	2057	2152	2248
18	1711	1800	1891	1985	2080	2178	2278	2380
19	1806	1900	1996	2096	2195	2299	2403	2513
20	1902	2000	2102	2206	2312	2420	2530	2645
21	1997	2100	2207	2316	2427	2541	2657	2777
22	2091	2200	2312	2426	2542	2662	2784	2909
23	2187	2300	2416	2536	2658	2783	2911	3041
24	2282	2400	2522	2646	2774	2904	3038	3174
25	2376	2500	2627	2757	2889	3025	3164	3306
26	2472	2600	2732	2868	3004	3146	3290	3438
27	2567	2700	2837	2978	3120	3267	3417	3571
28	2662	2800	2942	3088	3236	3388	3544	3701
29	2756	2900	3047	3198	3351	3509	3670	3835
30	2852	3000	3152	3308	3467	3630	3796	3968
31	2946	3100	3257	3418	3583	3751	3923	4100
32	3042	3200	3362	3528	3698	3872	4050	4232
33	3137	3300	3467	3638	3812	3993	4177	4364
34	3232	3400	3572	3748	3928	4114	4303	4497
35	3327	3500	3677	3858	4045	4235	4429	4629
36	3423	3600	3782	3969	4161	4356	4556	4761

TABLE VIII,

SHOWING THE CONTENTS OF STANDARD SAW-LOGS, FROM 10 INCHES DIAMETER TO 42.

Diam.	Decim's	Inches.	Diam.	Decim's	Inches.
10	100	.277	27	729	2.020
11	121	.335	28	784	2.171
12	144	.399	29	841	2.330
13	169	.478	30	900	2.493
14	196	.543	31	961	2.662
15	225	.623	32	1024	2.836
16	256	.709	33	1089	3.016
17	289	.800	34	1156	3.202
18	324	.897	35	1225	3.400
19	361	1.000	36	1296	3.590
20	400	1.108	37	1369	3.792
21	441	1.221	38	1444	4.000
22	484	1.341	39	1521	4.213
23	529	1.465	40	1600	4.432
24	576	1.595	41	1681	4.656
25	625	1.731	42	1764	4.886
26	676	1.872			

Remarks.—In most lumbering districts, where *piece* lumber is manufactured, the *standard* measure for logs is 19 inches diameter, and 13 feet long, which, it will be seen, gives 361 decimals, or 100 standard inches. Thus, 19×19—361, and 361÷361—1.00, which is the standard. If the log exceeds this standard, either in length or diameter, the surplus is reckoned as the decimal parts of another log.

Example.—What are the standard contents of a log 23 inches diameter, and 14 feet long? 23+23—529; and 259÷361—2·46, which is one log, and 46 hundredths of another.

Note—Multiply the standard inches given for a log of any given diameter by the number of logs of the same diameter; the product will be the measure for such number of logs. The diameter is to be the average measure, taken at the smallest end, inside the bark.

TABLE OF

SPECIFIC GRAVITY AND WEIGHT OF DIFFERENT WOODS.

TIMBER.	Specific Gravity	Lbs. pr. C. Ft.
Oak, Dry, ...	.625	39.06
" Green, ...	1.113	69.56
Beach, Dry, ...	.69	43.12
Maple, ...	.795	49.68
Sycamore, Dry, ..	.590	36.87
" Green,	.645	40.31
Chesnut, Dry, ...	.535	33.45
" Green, ..	.875	54.68
Ash, Dry, ...	.845	52.81
Elm, Dry, ...	.588	36.75
" Green, ...	.940	58.75
Walnut, Green, ..	.920	57.50
" Dry, ...	.616	38.50
Poplar	.421	26.31
Cedar, ...	.560	35.
" Dry, ...	.453	28.31
Lignum Vitie, ...	1.333	83.31
Pine, ...	.368	23.
" Pitch, ...	.936	58.5
Mahogany, Dry, ..	.852	53.30
Willow, Green, ..	.619	38.68
" Dry, ...	.486	30.37
Water, ...	1.00	62.50

TABLE FOR

CAPACITY OF CISTERNS.

Bottom		Staves.		Cap.
Ft.	In.	Ft.	In.	Bbls.
3	6	3	6	7
4		4		11
4		4	8	13
4		5	4	15
4	6	4		14
4	6	4	8	16
4	6	5	4	18
5		4		18
5		4	8	20
5		5	4	22
5		6		26
5	6	4		22
5	6	4	8	25
5	6	5	4	27
5	6	6		31
6		4	8	30
6		5	4	32
6		6		37
6		7		46
6	6	5	4	38
6	6	6		43
6	6	7		51
6	6	8		61
7		5	4	44
7		6		50
7		7		59

TABLE IX.

ACCURATE WOOD-MEASURE

LENGTH EIGHT FEET.

Width.		Height in ft.				Height in inches.										
FT.	IN.	1	2	3	4	1	2	3	4	5	6	7	8	9	10	11
2	6	20	40	60	80	2	3	5	7	8	10	12	13	15	17	18
	7	21	41	62	82	2	3	5	7	8	10	12	14	15	17	18
	8	21	42	64	85	2	4	5	7	9	11	13	14	16	18	20
	9	22	44	66	88	2	4	6	8	9	11	13	15	17	18	20
	10	23	45	68	91	2	4	6	8	10	11	13	15	17	19	21
	11	23	47	70	94	2	4	6	8	10	12	14	15	17	19	21
3	0	24	48	72	96	2	4	6	8	10	12	14	16	18	20	22
	1	25	49	74	99	2	4	6	8	10	12	14	17	18	20	22
	2	25	51	76	101	2	4	6	8	10	13	15	17	19	21	23
	3	26	52	78	104	2	4	7	9	11	13	15	17	20	22	24
	4	27	53	80	107	2	5	7	9	11	14	16	18	20	23	25
	5	27	55	82	109	2	5	7	9	11	14	16	18	20	23	25
	6	28	56	84	112	2	5	7	9	12	14	16	19	21	23	26
	7	29	57	86	115	3	5	8	10	12	15	17	19	22	24	27
	8	29	59	88	117	3	5	8	10	12	15	17	19	22	24	27
	9	30	60	90	120	3	5	8	10	13	15	18	20	23	26	28
	10	31	61	92	123	3	5	8	10	13	16	18	21	23	26	29
	11	31	63	94	125	3	5	8	10	13	16	18	21	23	26	29
4	0	32	64	96	128	3	5	8	11	13	16	19	21	24	27	29

EXPLANATION.—Find the width of the load in the left-hand column of the table; then move to the right, on the *same line*, till you come under the height in *feet*, and you have the contents in feet; then move to the right, on the same line, till you come to the height in *inches*, and you will have the *additional* contents in feet for the height in inches. The *sum* of these two gives the true contents in feet. For loads 12 feet long, add one-half, and for 4 feet, subtract one-half.

Example.—If a load of wood be 2 feet 10 inches wide, and 3 feet 7 inches high, what are the contents? Against 2 feet 10 inches, and under 3 feet, stands 68; and under 7 inches, at the top, stands 13: then 13-|-68=81, the true contents in feet.

TABLE X.

PRICE OF WOOD PER CORD.

Ft	$1 50	$1 75	$2 00	$2 25	$2 50	$2 75
1	0.01	0.01	0.01	0.02	0.02	0.02
2	0.02	0.02	0.03	0.03	0.04	0.04
3	0.03	0.04	0.04	0.05	0.06	0.06
4	0.05	0.06	0.06	0.07	0.08	0.09
5	0.06	0.07	0.08	0.09	0.10	0.11
6	0.07	0.08	0.09	0.11	0.12	0.13
7	0.08	0.10	0.11	0.12	0.14	0.15
8	0.09	0.11	0.12	0.14	0.16	0.18
16	0.19	0.22	0.25	0.28	0.31	0.35
24	0.28	0.33	0.37	0.42	0.47	0.52
32	0.38	0.44	0.50	0.56	0.63	0.69
40	0.47	0.55	0.63	0.70	0.78	0.86
48	0.56	0.66	0.75	0.84	0.94	1.03
56	0.61	0.77	0.88	0.98	1.09	1.20
64	0.75	0.88	1.00	1.13	1.25	1.38
72	0.84	0.98	1.13	1.27	1.41	1.55
80	0.94	1.09	1.25	1.41	1.56	1.72
84	0.98	1.15	1.31	1·48	1.64	1.81
88	1.03	1.20	1.38	1.55	1.72	1.89
92	1.08	1.26	1.44	1.62	1.80	1.98
96	1.13	1.31	1.50	1.69	1.88	2.06
104	1.22	1.42	1.63	1.83	2.03	2.23
112	1.31	1.53	1.75	1.97	2.19	2.41
120	1.41	1.64	1.88	2.11	2.34	2.58
128	1.50	1.75	2.00	2.25	2.50	2.75

Explanation.—Find the number of feet in the left hand column of the table; then the price, in dollars and cents at the top of the page, and trace the line and column until they meet, and you will find the amount in dollars and cents.

PRICE OF WOOD PER CORD.

Ft	$3 00	$3 25	$3 50	$4 00	$4 50	$5 00
1	0.02	0.02	.02	.03	.03	.03
2	0.05	0.05	.05	.06	.07	.07
3	0.07	0.07	.08	.09	.10	.11
4	0.09	0.10	.10	.12	.14	.15
5	0.12	0.13	.13	.15	.17	.19
6	0.14	0.15	.16	.18	.21	.23
7	0.16	0.17	.19	.21	.24	.27
8	0.19	0.20	.21	.24	.28	.31
16	0.37	0.40	.43	.49	.56	.62
24	0.56	0.61	.65	.75	.84	.93
32	0.75	0.81	.87	1.00	1.12	1.25
40	0.94	1.02	1.09	1.25	1.40	1.56
48	1.12	1.22	1.31	1.50	1.68	1.87
56	1.18	1.42	1.53	1.75	1.96	2.18
64	1.50	1.62	1.75	2.00	2.25	2.50
72	1.69	1.83	1.96	2.25	2.53	2.81
80	1.88	2.03	2.18	2.50	2.81	3.13
84	1.97	2.13	2.29	2.62	2.95	3.28
88	2.06	2.23	2.40	2.75	3.09	3.43
92	2.15	2.33	2.51	2.87	3.23	3.59
96	2.25	2.44	2.62	3.00	3.37	3.75
104	2.44	2.64	2.84	3.25	3.65	4.05
112	2.62	2.84	3.06	3.50	3.93	4.38
120	2.81	3.05	3.28	3.75	4.21	4.68
128	3.00	3.25	3.49	4.00	4.50	5.00

EXAMPLE.—If a load of wood contain 98 feet, at two dollars and fifty cents per cord—first find the amount of 96 feet, which is $1.88; and then add the value of 2 feet. (4 cents,) making $1.92. So of all similar examples.

PRICE OF WOOD PER CORD.

Ft	$5 50	$6 00	$6 50	$7 00	$7 50	$8 00
1	.04	.04	.05	.05	.05	.06
2	.08	.09	.10	.10	.11	.12
3	.12	.14	.15	.16	.17	.18
4	.17	.18	.20	.21	.23	.25
5	.21	.23	.25	.27	.29	.31
6	.25	.28	.30	.32	.35	.37
7	.30	.32	.35	.38	.41	.43
8	.34	.37	.40	.43	.46	.50
16	.68	.74	.81	.87	.93	1.00
24	1.03	1.12	1.22	1.31	1.41	1.50
32	1.37	1.50	1.62	1.75	1.87	2.00
40	1.72	1.87	2.03	2.19	2.34	2.50
48	2.06	2.25	2.44	2.62	2.81	3.00
56	2.40	2.62	2.84	3.06	3.28	3.50
64	2.75	3.00	3.25	3.50	3.75	4.00
72	3.09	3.37	3.65	3.93	4.23	4.50
80	3.43	3.74	4.06	4.37	4.68	5.00
84	3.60	3.94	4.26	4.59	4.92	5.25
88	3.78	4.12	4.47	4.81	5.16	5.50
92	3.95	4.30	4.67	5.03	5.40	5.75
96	4.12	4.49	4.87	5.25	5.62	6.00
104	4.47	4.87	5.28	5.69	6.09	6.50
112	4.80	5.24	5.69	6.12	6.56	7.00
120	5.15	5.62	6.09	6.56	7.03	7.50
128	5.50	6.00	6.50	7.00	7.50	8.00

TABLE XI.

TABLE OF WAGES

EXPLANATION.

THE column in the left-hand of the table shows the number of Days; and the rate per month is seen at the top of the page.

To find the amount of 19 day's work, at $11 per month: find 19 in the column of days; then move to the right, on the same line, till you come under $11, (the rate per month) and you find $8.04—the answer sought.

The amount for 11 days, at $9 per month, would be found to be $3.81.

In all cases, the amount will be found directly under the price per month, and at the right of the given time.

In this table, the wages are cast at 26 working days per month. For a fraction of a day, take an equal part of the amount for one day, and for rates less than $8 per month, half what is shown for twice the amount. Thus, at $6 per month, for 11 days, take half what the tables give for $12, that is, $2.54.

NOTE.—If the wages per month should exceed any provisions made in these tables, the amount may easily be found by taking double what is shown for half such wages.

TABLE OF WAGES, AT GIVEN RATES PER MONTH OF TWENTY-SIX DAYS.

D.	$8.	$9.	$10.	$11.	$12.	$13.	$14.
1	.31	.35	.38	.42	.46	.50	.54
2	.62	.69	.77	.85	.92	1.00	1.08
3	.92	1.04	1.15	1.27	1.38	1.50	1.62
4	1.23	1.38	1.54	1.69	1.85	2.00	2.15
5	1.54	1.73	1.92	2.12	2.31	2.50	2.69
6	1.85	2.08	2.31	2.54	2.77	3.00	3.23
7	2.15	2.42	2.69	2.96	3.23	3.50	3.77
8	2.46	2.77	3.08	3.38	3.69	4.00	4.31
9	2.77	3.12	3.46	3.81	4.15	4.50	4.85
10	3.08	3.46	3.85	4.23	4.62	5.00	5.38
11	3.38	3.81	4.23	4.65	5.08	5.50	5.92
12	3.69	4.15	4.62	5.08	5.54	6.00	6.46
13	4.00	4.50	5.00	5.50	6.00	6.50	7.00
14	4.31	4.85	5.38	5.92	6.46	7.00	7.54
15	4.62	5.19	5.77	6.35	6.92	7.50	8.08
16	4.92	5.54	6.16	6.77	7.38	8.00	8.62
17	5.23	5.88	6.54	7.19	7.85	8.50	9.15
18	5.54	6.23	6.92	7.62	8.31	9.00	9.69
19	5.85	6.58	7.31	8.04	8.77	9.50	10.23
20	6.15	6.92	7.69	8.46	9.23	10.00	10.77
21	6.46	7.27	8.08	8.88	9.69	10.50	11.31
22	6.77	7.61	8.46	9.31	10.15	11.00	11.85
23	7.08	8.96	8.85	9.73	10.62	11.50	12.38
24	7.38	8.31	9.23	10.15	11.08	12.00	12.92
25	7.69	8.65	9.62	10.58	11.54	12.50	13.46
26	8.00	9.00	10.00	11.00	12.00	13.00	14.00

TABLE OF WAGES, AT GIVEN RATES PER MONTH OF TWENTY-SIX DAYS.

D.	$15.	$16.	$17.	$18.	$19.	$20.	$21.
1	.58	.62	.66	.69	.73	.77	.81
2	1.15	1.23	1.31	1.38	1.46	1.54	1.62
3	1.73	1.85	1.96	2.08	2.19	2.31	2.42
4	2.31	2.46	2.62	2.77	2.92	3.08	3.23
5	2.88	3.08	3.27	3.46	3.65	3.85	4.04
6	3.46	3.69	3.92	4.15	4.38	4.62	4.85
7	4.04	4.31	4.58	4.85	5.12	5.38	5.65
8	4.62	4.92	5.23	5.54	5.85	6.16	6.46
9	5.19	5.54	5.88	6.23	6.58	6.92	7.27
10	5.77	6.15	6.54	6.92	7.31	7.69	8.08
11	6.35	6.77	7.19	7.62	8.04	8.46	8.88
12	6.92	7.38	7.85	8.31	8.77	9.23	9.69
13	7.50	8.00	8.50	9.00	9.50	10.00	10.50
14	8.08	8.62	9.15	9.69	10.23	10.77	11.31
15	9.05	9.23	9.81	10.38	10.96	11.54	12.12
16	9.23	9.85	10.46	11.08	11.69	12.31	12.92
17	9.81	10.46	11.12	11.77	12.42	13.08	13.73
18	10.38	11.08	11.77	12.46	13.15	13.85	14.54
19	10.96	11.69	12.42	13.15	13.88	14.62	15.35
20	11.54	12.31	13.08	13.85	14.62	15.38	16.15
21	12.12	12.92	13.73	14.54	15.35	16 16	16.96
22	12.69	13.54	14.38	15.23	16.08	16.92	17.77
23	13.27	14.15	15.04	15.92	16.81	17.69	18.58
24	13.85	14.77	15.69	16.62	17.54	18.46	19.38
25	14.42	15.38	16.35	17.31	18.27	19.23	20.19
26	15.00	16.00	17.00	18.00	19.00	20.00	21.00

TABLE OF WAGES, AT GIVEN RATES PER MONTH OF TWENTY-SIX DAYS.

D.	$22.	$23.	$24.	$25.	$26	$27.	$28.
1	0.85	.88	.92	.96	1.00	1.04	1.08
2	1.70	1.77	1.85	1.92	2.00	2.07	2.15
3	2.54	2.65	2.77	2.88	3.00	3.11	3.23
4	3.38	3.53	3.69	3.84	4.00	4.15	4.31
5	4.23	4.42	4.62	4.81	5.00	5.19	5.38
6	5.10	5.30	5.54	5.77	6.00	6.23	6.46
7	5.92	6.19	6.46	6.73	7.00	7.27	7.54
8	6.77	7.08	7.38	7.69	8.00	8.30	8.62
9	7.61	7.96	8.31	8.65	9.00	9.34	9.69
10	8.46	8.85	9.23	9.61	10.00	10.38	10.77
11	9.30	9.93	10.15	10.57	11.00	11.42	11.84
12	10.15	10.62	11.08	11.54	12.00	12.46	12.94
13	11.02	11.50	12.00	12.50	13.00	13.50	14.00
14	11.84	12.38	12.92	13.46	14.00	14.52	15.08
15	12.69	13.27	13.85	14.42	15.00	15.58	16.15
16	13.54	14.15	14.77	15.38	16.00	16.61	17.23
17	14.38	15.03	15.70	16.34	17.00	17.65	18.31
18	15.23	15.91	16.62	17.31	18.00	18.68	19.38
19	16.07	16.89	17.54	18.27	19.00	19.72	20.46
20	16.92	17.69	18.46	19.23	20.00	20.76	21.54
21	17.77	18.56	19.38	20.19	21.00	21.80	22.61
22	18.61	19.46	20.31	21.15	22.00	22.84	23.69
23	19.46	20.34	21.23	22.11	23.00	23.88	24.77
24	20.30	21.22	22.15	23.08	24.00	24.91	25.85
25	21.15	22.12	23.08	24.04	25.00	25.95	26.92
26	22.00	23.00	24.00	25.00	26.00	27.00	28.00

TABLE OF WAGES, AT GIVEN RATES PER MONTH OF TWENTY-SIX DAYS.

D.	$29.	$30.	$31.	$32.	$33.	$34.
1	1.12	1.15	1.19	1.23	1.27	1.30
2	2.23	2.30	2.38	2.46	2.54	2.60
3	3.34	3.46	3.58	3.69	3.81	3.90
4	4.46	4.62	4.77	4.92	5.08	5.20
5	5.58	5.77	5.96	6.15	6.35	6.50
6	6.69	6.92	7.15	7.38	7.62	7.84
7	7.78	8.08	8.35	8.61	8.89	9.15
8	8.92	9.23	9.53	9.85	10.16	10.46
9	10.04	10.38	10.73	11.08	11.43	11.77
10	11.15	11.54	11.92	12.31	12.70	13.07
11	12.27	12.69	13.12	13.54	13.96	14.38
12	13.38	13.85	14.32	14.77	15.24	15.69
13	14.50	15.00	15.50	16.00	16.51	17.00
14	15.61	16.05	16.70	17.23	17.78	18.30
15	16.73	17.31	17.88	18.46	19.04	19.60
16	17.84	18.46	19.07	19.69	20.30	20.92
17	18.96	19.62	20.27	20.92	21.59	22.23
18	20.07	20.77	21.47	22.15	22.86	23.53
19	21.19	21.92	22.65	23.38	24.13	24.83
20	22.30	23.08	23.85	24.62	25.38	26.15
21	23.42	24.23	25.04	25.85	26.66	27.45
22	24.53	25.38	26.23	27.08	27.93	28.77
23	25.65	26.54	27.42	28.31	29.20	30.07
24	26.76	27.67	28.61	29.54	30.48	31.37
25	27.88	28.85	29.81	30.77	31.73	32.68
36	29.00	30 00	31.00	32.00	33.00	34.00

TABLE OF WAGES, AT GIVEN RATES PER MONTH OF TWENTY-SIX DAYS.

D.	$35.	$36.	$37.	$38.	$39.	$40.
1	1.35	1.38	1.42	1.46	1.50	1.54
2	2.69	2.77	2.84	2.92	3.00	3.08
3	4.04	4.15	4.27	4.38	4.50	4.62
4	5.38	5·54	5.69	5.85	6.00	6.15
5	6.73	6.92	7.11	7.31	7.50	7.69
6	8.07	8.31	8.53	8.77	9.00	9.23
7	9.42	9.69	9.96	10.23	10.50	10.77
8	10.77	11.07	11.38	11.69	12.00	12.31
9	12.11	12.46	12·81	13.15	13.50	13.84
10	13.46	13.84	14.23	14.61	15.00	15.38
11	14.81	15.22	15.65	16.07	16.50	16.92
12	16.15	16.61	17.07	17.53	18.00	18.46
13	17.50	18.00	18.50	19.00	19.50	20.00
14	18.84	19.38	19.92	20.46	21.00	21.54
15	20.19	20.76	21.34	21.92	22.50	23.07
16	21.54	22.15	22.77	23.38	24.00	24.61
17	22.88	23.53	24.19	24.84	25.50	26.15
18	24.23	24.92	25.61	26.30	27.00	27.69
19	25.57	26.30	27.04	27.76	28.50	29.23
20	26.92	27.68	28.46	29.22	30.00	30.77
21	28.26	29.06	29.88	30.69	31.50	32.31
22	29.61	30.45	31.31	32.14	33.00	33.84
23	30.96	31.83	32.73	33.60	34.50	35.38
24	32.31	33.22	34.15	35.06	36.00	36.92
25	33.65	34.60	35.57	36.52	37.50	38.46
26	35.00	36.00	37.00	38.00	39.00	40.00

TABLE

Showing the amount of wages per week and year at a given sum per hour and day.

Pr day of 10 hours.	Pr hour.	Pr week of 6 days.	Pr y'r of 52 weeks.
$ cts.	cts. m.	$ cts.	$ cts.
.10	1.0	.60	31.20
.15	1.5	.90	46.80
.20	2.0	1.20	62.40
.25	2.5	1.50	78.00
.30	3.0	1.80	93.60
.31¼	3.1	1.87½	97.50
.35	3.5	2.10	109.20
.37½	3.7	2.25	117.00
.40	4.0	2.40	124.80
.43¾	4.4	2.62½	136.50
.45	4.5	2.70	140.40
.50	5.0	3.00	156.00
.55	5.5	3.30	171.60
.56¼	5.6	3.37½	174.50
.60	6.0	3.60	187.20
.62½	6.2	3.75	195.00
.65	6.5	3.90	202.80
.68¾	6.9	4.12½	214.50
.70	7.0	4.20	218.40
.75	7.5	4.50	232.00
.80	8.0	4.80	249.60
.81¼	8.1	4.87½	253.50
.85	8.5	5.10	265.20
.87½	8.7	5.25	273.00
.90	9.0	5.40	280.80
.93¾	9.4	5.62½	292.50
.95	9.5	5.70	296.40
1.00	10.0	6.00	312.00
1.12½	11.2	6.75	351.00
1.25	12.5	7.50	390.00
1.31¼	13.1	7.87½	409.50
1.37½	13.7	8.25	429.00
1.50	15.0	9.00	468.00
2.00	20.0	12.00	624.00

TABLE

Giving the am't of wages per day at a given sum per month.

Pr m'th of 26 dys	Pr day.
$	$ cts.
5	.19
6	.23
7	.27
8	.31
9	.35
10	.38
11	.42
12	.46
13	.50
14	.54
15	.58
16	.62
17	.66
18	.69
19	.73
20	.77
21	.81
22	.84
23	.88
24	.92
25	.96
26	1.00
27	1.04
28	1.08
29	1.11
30	1.15
31	1.19
32	1.23
33	1.27
34	1.31
35	1.34
36	1.38
37	1.42
38	1.46

TABLE XII.

OF BOARD, RENT, OR EXPENSES, PER WEEK OF SIX DAYS.

TIME.		Rate. $1.00	Rate $1.25	Rate $1.37½	Rate $1.50	Rate $1.62½
Weeks.	Days.					
	1	.17	.21	.23	.25	.27
	2	.33	.42	.46	.50	.54
	3	.50	.63	.69	.75	.81
	4	.67	.83	.92	1.00	1.08
	5	.83	1.04	1.15	1.25	1.35
1	0	1·00	1.25	1.38	1.50	1.63
2	0	2.00	2.50	2.75	3.00	3.25
3	0	3.00	3.75	4.13	4.50	4.88
4	0	4.00	5.00	5.50	6.00	6.50
5	0	5.00	6.25	6.87	7.50	8.13

TIME.		Rate $1.75	Rate $2.00	Rate $2.25	Rate $2.50	Rate $3.00
Weeks.	Days.					
	1	.29	.33	.38	.42	.50
	2	.58	.67	.75	.83	1.00
	3	.88	1.00	1.13	1.25	1.50
	4	1.17	1.33	1.50	1.67	2.00
	5	1.46	1.67	1.87	2.08	2.50
1	0	1.75	2.00	2.25	2.50	3.00
2	0	3.50	4.00	4.50	5.00	6.00
3	0	5.25	6.00	6.75	7·50	9.00
4	0	7.00	8.00	9.00	10.00	12.00
5	0	8.75	10.00	11.25	12.50	15.00

REMARKS.

The column on the left shows the number of days; the caption, the rate per week.

TABLE XIII.

OF BOARD, RENT, OR EXPENSES, PER WEEK OF SEVEN DAYS.

TIME.		Rate $1.00	Rate $1.25	Rate $1.37½	Rate $1.50	Rate $1.62½
Weeks.	Days.					
	1	.14	.18	.20	.21	.23
	2	.29	.36	.39	.43	.46
	3	.43	.54	.59	.64	.70
	4	.57	.71	.79	.86	.93
	5	.71	.89	.98	1.07	1.16
	6	.86	1.07	1.18	1.29	1.39
1	0	1.00	1.25	1.38	1.50	1.63
2	0	2.00	2.50	2.75	3.00	3.25
3	0	3.00	3.75	4.13	4.50	4.88
4	0	4.00	5.00	5.50	6.00	6.50
5	0	5.00	6.25	6.87	7.50	8.13

TIME.		Rate $1.75	Rate $2.00	Rate $2.25	Rate $2.50	Rate $3.00
Weeks.	Days.					
	1	.25	.29	.32	.36	.43
	2	.50	.57	.64	.71	.86
	3	.75	.86	.96	1.07	1.29
	4	1.00	1.14	1.29	1.43	1.71
	5	1.25	1.43	1.61	1.79	2.14
	6	1.50	1.71	1.93	2.14	2.57
1	0	1.75	2.00	2.25	2.50	3.00
2	0	3.50	4.00	4.50	5.00	6.00
3	0	5.25	6.00	6.75	7.50	9.00
4	0	7.00	8.00	9.00	10.00	12.00
5	0	8.75	10.00	11.25	12.50	15.00

OF BOARD, RENT, OR EXPENSES, PER WEEK OF SEVEN DAYS.

TIME.		Rate $3.25	Rate $3.50	Rate $3.75	Rate $4.00	Rate $4.25	Rate $4.50	Rate $4.75	Rate $5.00
Weeks	Days								
	1	.46	.50	.53	.57	.61	.64	.68	.71
	2	.93	1.00	1.07	1.14	1.21	1.28	1.36	1.43
	3	1.39	1.50	1.61	1.71	1.82	1.93	2.03	2.14
	4	1.86	2.00	2.14	2.28	2.43	2.57	2.71	2.86
	5	2.32	2.50	2.68	2.86	3.06	3.21	3.39	3.57
	6	2.78	3.00	3.21	3.43	3.64	3.86	4.07	4.28
1	0	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00
2	0	6.50	7.00	7.50	8.00	8.50	9.00	9.50	10.00
3	0	9.75	10.50	11.25	12.00	12.75	13.50	14.25	15.00
4	0	13.00	14.00	15.00	16.00	17.00	18.00	19.00	20.00
5	0	16.25	17.50	18.75	20.00	21.25	22.50	23.75	25.00

Remarks.—The column on the left shows the number of days; the caption, the rate per week.

TABLE XIV.

STAVE AND HEADING BOLTS.

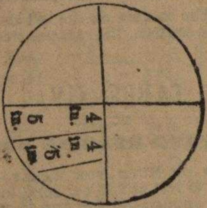
Explanation of Rule for Table.—Suppose a load to contain 25 feet at 2.75 per cord, look at 25 feet and under $2.75 opposite 25 you find $2.15 the cost of 25 feet. If the price is wanted at $4.50 or $6.75 per cord, you first find price of the load at $4, or $6.00, then at 50cts., or 75cts. and add the two amounts together, so of other numbers.

Simple Rule for Measuring Loads.—As per table divide the price per cord by 32, the number of feet in a cord, *i. e.* $6, the price per cord divided by 32, the number of feet in a cord gives you 19cts. per foot. When fractions occur, if over ½, add one; if less nothing.

REMARKS.

HEADING BOLTS are made 18 inches long:
STAVE BOLTS " " 32 " "

They are usually sold by the wagon load, at so much per cord, a cord being 8 feet long and 4 feet high—32 feet—width not taken into account. For Stave bolts the following timber is generally used in the Northern States: White Ash, Elm and Red Oak; it should be sound and free from knots and bark, and got out in proper shape, as per diagram.



HEADING BOLTS are generally made of sound Bass Wood, or Whitewood, timber either 18 inches long or 37 inches, and not less than 8 inches in diameter. If from 8 to 12 inches in diameter, leave them whole; if from 12 to 18 inches, halve them; if over 18 inches, quarter.

STAVE AND HEADING BOLT TABLE.

PRICE PER CORD.

Ft.	.12½	.25	.37½	.50	.62½	.75	.87½	$1.00	$1.25
1	.00	.01	.01	.02	.02	.02	.03	.03	.04
2	.00	.02	.02	.03	.04	.05	.05	.06	.08
3	.01	.02	.04	.04	.06	.07	.08	.09	.12
4	.02	.03	.05	.06	.08	.09	.11	.12	.16
5	.02	.04	.06	.08	.10	.12	.14	.16	.20
6	.02	.05	.07	.09	.12	.14	.16	.19	.23
7	.03	.05	.08	.11	.14	.16	.19	.22	.27
8	.03	.06	.09	.12	.16	.19	.22	.25	.31
9	.04	.07	.11	.14	.18	.21	.25	.28	.35
10	.04	.08	.12	.16	.20	.23	.27	.31	.39
11	.04	.09	.13	.17	.21	.26	.30	.34	.45
12	.05	.09	.14	.19	.23	.28	.33	.37	.47
13	.05	10	.15	.20	.25	.30	.36	.41	.50
14	.05	.11	.16	.22	.27	.33	.38	.44	.54
15	.06	.12	.18	.23	.29	.35	.41	.47	.58
16	.06	.13	.19	.25	.31	.38	.44	.50	.62
17	.07	.13	.20	.27	.33	.40	.46	.53	.66
18	.07	.14	.21	.28	.35	.42	.49	.56	.70
19	.07	.15	.22	.30	.37	.44	.52	.59	.74
20	.08	.16	.23	.31	.39	.47	.55	.62	.78
21	.08	.16	.25	.33	.41	.49	.57	.66	.82
22	.09	.17	.26	.34	.43	.52	.60	.69	.86
23	.09	.18	.27	.36	.45	.54	.63	.72	.90
24	.09	.19	.28	.37	.47	.56	.66	.75	.94
25	.10	.19	.29	.39	.49	.59	.68	.78	.98
26	.10	.20	.30	.41	.51	.61	.71	.81	1.00
27	.11	.21	.32	.42	.53	.63	.74	.84	1.04
28	.11	.22	.33	.44	.55	.66	.77	.87	1.08
29	.11	.23	.34	.45	.57	.68	.79	.91	1.13
30	.12	.23	.35	.47	.59	.70	.82	.94	1.17
31	.12	.24	.36	.48	.61	.73	.85	.97	1.21
32	.13	.25	.38	.50	.63	.75	.88	1.00	1.25

STAVES AND HEADING BOLT TABLE.

PRICE PER CORD.

Ft.	$1.50	$1.75	$2.00	$2.25	$2.50	$2.75	$3.00	$3.25	$3.50
1	.05	.05	.06	.07	.08	.08	.09	.10	.11
2	.09	.11	.12	.14	.15	.17	.19	.21	.22
3	.14	.16	.19	.21	.23	.26	.28	.30	.32
4	.19	.22	.25	.28	.31	.34	.37	.41	.44
5	.23	.27	.31	.35	.39	.43	.47	.51	.55
6	.28	.33	.37	.42	.46	.51	.56	.61	.65
7	.33	.38	.44	.49	.55	.60	.66	.71	.77
8	.38	.43	.50	.56	.62	.69	.75	.81	.87
9	.42	.49	.56	.63	.70	.77	.84	.91	.98
10	.47	.55	.62	.70	.78	.85	.94	1.03	1.10
11	.52	.60	.69	.77	.86	.95	1.03	1.12	1.20
12	.56	.66	.75	.84	.94	1.03	1.12	1.21	1.30
13	.61	.71	.81	.91	1.01	1.11	1.22	1.32	1.42
14	.65	.77	.87	.98	1.09	1.20	1.31	1.42	1.53
15	.70	.82	.94	1.06	1.17	1.29	1.41	1.53	1.64
16	.75	.88	1.00	1.13	1.25	1.38	1.50	1.63	1.75
17	.80	.93	1.06	1.19	1.33	1.46	1.59	1.72	1.86
18	.84	.98	1.12	1.26	1.40	1.54	1.69	1.83	1.97
19	.89	1.04	1.19	1.34	1.49	1.63	1.78	1.93	2.08
20	.94	1.10	1.25	1.41	1.56	1.72	1.87	2.03	2.18
21	.98	1.15	1.31	1.47	1.64	1.80	1.97	2.13	2.30
22	1.03	1.20	1.37	1.54	1.71	1.89	2.06	2.23	2.40
23	1.08	1.26	1.44	1.62	1.80	1.98	2.16	2.34	2.52
24	1.12	1.31	1.50	1.69	1.87	2.06	2.25	2.44	2.62
25	1.17	1.37	1.56	1.75	1.95	2.15	2.34	2.53	2.73
26	1.22	1.42	1.62	1.82	2.03	2.23	2.44	2.64	2.85
27	1.27	1.48	1.69	1.90	2.11	2.32	2.53	2.74	2.95
28	1.31	1.53	1.75	1.97	2.19	2.41	2.62	2.84	3.06
29	1.36	1.59	1.81	2.03	2.26	2.45	2.72	2.94	3.17
30	1.41	1.64	1.87	2.10	2.34	2.57	2.81	3.04	3.28
31	1.45	1.70	1.94	2.18	2.42	2.67	2.91	3.15	3.39
32	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50

STAVES AND HEADING BOLT TABLE.

PRICE PER CORD.

Ft	$3.75	$4.00	$5.00	$6.00	$7.00	$8.00	$9.00	$10.00
1	.11	.13	.16	.19	.22	.25	.28	.31
2	.24	.25	.31	.37	.44	.50	.56	.62
3	.35	.37	.47	.56	.66	75	.84	.94
4	.48	.50	.62	.75	.87	1.00	1.12	1.25
5	.59	.62	.78	.94	1.09	1.25	1.42	1.56
6	.70	.75	.93	1.12	1.31	1.50	1.69	1.87
7	.82	.87	1.09	1.31	1.53	1 75	1.97	2.18
8	.94	1.00	1.25	1.50	1.75	2 00	2.25	2.50
9	1.05	1.12	1.41	1.69	1.97	2 25	2.53	2.81
10	1.17	1.25	1.56	1.87	2.19	2 50	2.81	3.12
11	1.29	1.37	1.72	2.06	2.40	2 75	3.09	3.44
12	1.40	1.50	1.87	2.25	2.62	3.00	3.34	3.75
13	1.52	1.62	2.93	2.43	2.84	3 25	3.65	4.06
14	1.64	1.75	2.19	2.62	3.06	3 50	3.94	4.37
15	1.75	1.87	2.34	2.81	3.28	3 75	4.22	4.69
16	1.88	2.00	1.50	3.00	3.50	4 00	4.50	5.00
17	1.99	2.12	2.67	3.19	3.72	4 25	4.79	5.31
18	2.11	2.25	2.81	3.37	3.94	4.50	5.06	5.62
19	2.22	2.37	2.97	3.56	4.16	4 75	5.34	5.94
20	2.34	2.50	3.12	3.75	4.37	5.00	5.62	6.25
21	2.46	2.62	3.28	3.94	4.59	5.25	5.90	6.56
22	2.58	2.75	3.44	4.12	4.81	5.50	6.18	6.87
23	2.70	2.87	3.59	4.31	5.03	5.75	6.46	7.19
24	2.81	3.00	3.75	4.50	5.25	6 00	6.75	7.50
25	2.93	3.12	3.91	4.69	5.47	6 25	7.03	7.81
26	3.05	3.25	4.06	4.87	5.69	6.50	7.31	8.12
27	3.16	3.37	4.22	5.06	5.90	6.75	7.59	8.44
28	3.28	3.50	4.37	5.25	6.12	7.00	7.87	8.75
29	3.40	3.62	4.53	5.43	6.34	7 25	8.15	9.06
30	3.51	3.75	4.69	5.62	6.56	7.50	8.43	9.37
31	3.64	3.87	4.84	5.81	6.78	7.75	8.71	9.69
32	3.75	4.00	5.00	6.00	7.00	8.00	9.00	10.00

SHORT RULES FOR CASTING INTEREST.

For finding the interest on any principal for any number of days, the answer in each case being in cents. Separate the two right hand figures to express it in dollars and cents:

Four Per Cent.—Multiply the principal by the number of days to run; separate the right hand figure from the product, and divide by 9.

Five Per Cent.—Multiply by number of days, and divide by 72.

Six Per Cent.—Multiply by number days; separate right hand figure, and divide by 6.

Seven Per Cent.—To find the Interest on any sum at 7 per cent., take the interest given by the tables at 6 per cent. add one-sixth to that amount and you have the interest at 7 per cent.

Eight Per Cent.—Multiply by number of days, and divide by 45.

Nine Per Cent.—Multiply by number of days; separate right hand figure, and divide by 4.

Ten Per Cent.—Multiply by number of days, and divide by 36.

Twelve Per Cent.—Multiply by number of days; separate right hand figure, and divide by 3.

Fifteen Per Cent.—Multiply by number of days, and divide by 24.

Eighteen Per Cent.—Multiply by number of days; separate right hand figure, and divide by 2.

Twenty Per Cent.—Multiply by number of days, and divide by 18.

TABLE XV.

TABLES OF INTEREST.

EXPLANATION.

The principal, beginning at $1, and proceeding to the highest sum in the tables, will, in all cases, be found at the head of the page. The *time*, for which the interest on any given amount may be sought, will be found in the left-hand column of the tables, from 1 day to 1 year; that is to say, from 1 to 18 days, in regular succession—then passing to a month, and then proceeding down to 12 months. The interest required for the given time on the given principal, will be found against the time contained in the tables, and directly under the principal. So we have, on the same page, the interest on the sum required for years, months, and days, for any period of time from 1 day to 1 year. If the interest on any given principal be required for a longer period of time than for which any provision has been made in these tables, we have only to double the amount of interest shown for half that time. Thus, if the interest on $28 be required for 2 years and 8 months, the tables show the interest for 1 year and 4 months to be $2·24; consequently, twice that amount will be the interest sought. If the interest on months and days be required, add the interest for the given months and days together; and, in like manner, for the years, months, and days.

TABLE OF INTEREST AT SIX PER CENT.

	$1	$2	$3	$4	$5	$6	$7	$8	$9	$10
Days. 1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	1	1	1
5	0	0	0	0	0	0	1	1	1	1
6	0	0	0	0	0	1	1	1	1	1
7	0	0	0	0	1	1	1	1	1	1
8	0	0	0	1	1	1	1	1	1	1
9	0	0	0	1	1	1	1	1	1	1
10	0	0	0	1	1	1	1	1	1	2
11	0	0	1	1	1	1	1	1	2	2
12	0	0	1	1	1	1	1	2	2	2
13	0	0	1	1	1	1	1	2	2	2
14	0	0	1	1	1	1	2	2	2	2
15	0	0	1	1	1	1	2	2	2	2
16	0	1	1	1	1	2	2	2	2	3
17	0	1	1	1	1	2	2	2	3	3
18	0	1	1	1	1	2	2	2	3	3
19	0	1	1	1	2	2	2	2	3	3
20	0	1	1	1	2	2	2	3	3	3
30	0	1	1	2	2	3	3	4	4	5
40	1	1	2	3	3	4	5	5	6	7
60	1	2	3	4	5	6	7	8	9	10
63	1	2	3	4	5	6	7	8	9	10
90	1	3	4	6	7	9	10	12	13	15
93	2	3	5	6	8	9	11	12	14	15
100	2	3	5	7	8	10	12	13	15	16
200	3	7	10	13	16	20	23	26	30	33
300	5	10	15	20	25	30	35	39	44	49
Months. 1	1	1	2	2	3	3	4	4	5	5
2	1	2	3	4	5	6	7	8	9	10
3	2	3	5	6	8	9	11	12	14	15
4	2	4	6	8	10	12	14	16	18	20
5	3	5	8	10	13	15	18	20	23	25
6	3	6	9	12	15	18	21	24	27	30
7	4	7	11	14	18	21	25	28	32	35
8	4	8	12	16	20	24	28	32	36	40
9	5	9	14	18	23	27	32	36	41	45
10	5	10	15	20	25	30	35	40	45	50
11	6	11	17	22	28	33	39	44	50	55
12	6	12	18	24	30	36	42	48	54	60

	$11	$12	$13	$14	$15	$16	$17	$18	$19	$20
Days. 1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	1	1	1	1	1
3	1	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1	1	2	2
6	1	1	1	1	1	2	2	2	2	2
7	1	1	1	2	2	2	2	2	2	2
8	1	2	2	2	2	2	2	2	2	3
9	2	2	2	2	2	2	3	3	3	3
10	2	2	2	2	2	3	3	3	3	3
11	2	2	2	3	3	3	3	3	3	4
12	2	2	3	3	3	3	3	4	4	4
13	2	3	3	3	3	3	4	4	4	4
14	3	3	3	3	3	4	4	4	4	5
15	3	3	3	3	4	4	4	4	5	5
16	3	3	3	4	4	4	4	5	5	5
17	3	3	4	4	4	4	5	5	5	6
18	3	4	4	4	4	5	5	5	6	6
19	3	4	4	4	5	5	5	6	6	6
20	4	4	4	5	5	5	6	6	6	7
30	5	6	6	7	7	8	8	9	9	10
40	7	8	9	9	10	11	11	12	12	13
60	11	12	13	14	15	16	17	18	19	20
63	11	12	13	14	16	17	18	19	20	21
90	16	18	19	21	22	24	25	27	28	30
93	17	18	20	21	23	24	26	28	29	31
100	18	20	21	23	25	26	28	30	31	33
200	36	39	43	46	49	53	56	59	62	66
300	54	59	64	69	74	79	84	89	94	99
Months. 1	6	6	7	7	8	8	9	9	10	10
2	11	12	13	14	15	16	17	18	19	20
3	17	18	20	21	23	24	26	27	29	30
4	22	24	26	28	30	32	34	36	38	40
5	28	30	33	35	38	40	43	45	48	50
6	33	36	39	42	45	48	51	54	57	60
7	39	40	46	49	53	56	60	63	67	70
8	44	48	52	56	60	64	68	72	76	80
9	50	54	59	63	68	72	77	81	86	90
10	55	60	65	70	75	80	85	90	95	1·00
11	61	66	72	77	83	88	94	99	1·05	1·10
12	66	72	78	84	90	96	1·02	1·08	1·14	1·20

		$21	$22	$23	$24	$25	$26	$27	$28	$29
Days.	1	0	0	0	0	0	0	0	0	0
	2	1	1	1	1	1	1	1	1	1
	3	1	1	1	1	1	1	1	1	1
	4	1	1	2	2	2	2	2	2	2
	5	2	2	2	2	2	2	2	2	2
	6	2	2	2	2	2	3	3	3	3
	7	2	3	3	3	3	3	3	3	3
	8	3	3	3	3	3	3	4	4	4
	9	3	3	3	4	4	4	4	4	4
	10	3	4	4	4	4	4	4	5	5
	11	4	4	4	4	5	5	5	5	5
	12	4	4	5	5	5	5	5	6	6
	13	4	5	5	5	5	6	6	6	6
	14	5	5	5	6	6	6	6	6	7
	15	5	5	6	6	6	6	7	7	7
	16	6	6	6	6	7	7	7	7	8
	17	6	6	6	7	7	7	8	8	8
	18	6	7	7	7	7	8	8	8	9
	19	7	7	7	7	8	8	8	9	9
	20	7	7	8	8	8	9	9	9	10
	30	10	11	11	12	12	13	13	14	14
	40	14	14	15	16	16	17	18	18	19
	60	21	22	23	24	25	26	27	28	29
	63	22	23	24	25	26	27	28	29	30
	90	31	33	34	36	37	39	40	41	43
	93	32	34	35	37	38	40	41	43	44
	100	35	36	38	39	41	43	44	46	48
	200	69	72	76	79	82	85	89	92	95
	300	1·04	1·08	1·13	1·18	1·23	1·28	1·33	1·38	1·43
Months.	1	11	11	12	12	13	13	14	14	15
	2	21	22	23	24	25	26	27	28	29
	3	32	33	35	36	38	39	41	42	44
	4	42	44	46	48	50	52	54	56	58
	5	53	55	58	60	63	65	68	70	73
	6	63	66	69	72	75	78	81	84	87
	7	74	77	81	84	88	91	95	98	1·02
	8	84	88	92	96	1·00	1·04	1·08	1·12	1·16
	9	95	99	1·04	1·08	1·13	1·17	1·22	1·26	1·31
	10	1·05	1·10	1·15	1·20	1·25	1·30	1·35	1·40	1·45
	11	1·16	1·21	1·27	1·32	1·38	1·43	1·49	1·54	1·60
	12	1·26	1·32	1·38	1·44	1·50	1·56	1·62	1·68	1·74

		$30	$35	$40	$45	$50	$55	$60	$65	$70
Days.	1	0	1	1	1	1	1	1	1	1
	2	1	1	1	1	2	2	2	2	2
	3	1	2	2	2	2	3	3	3	3
	4	2	2	3	3	3	4	4	4	5
	5	2	3	3	4	4	4	5	5	6
	6	3	3	4	4	5	5	6	6	7
	7	3	4	5	5	6	6	7	7	8
	8	4	5	5	6	7	7	8	9	9
	9	4	5	6	7	7	8	9	10	10
	10	5	6	7	7	8	9	10	11	12
	11	5	6	7	8	9	10	11	12	13
	12	6	7	8	9	10	11	12	13	14
	13	6	7	9	10	11	12	13	14	15
	14	7	8	9	10	12	13	14	15	16
	15	7	9	10	11	12	14	15	16	17
	16	8	9	11	12	13	14	16	17	18
	17	8	10	11	13	14	15	17	18	20
	18	9	10	12	13	15	16	18	19	21
	19	9	11	12	14	16	17	19	20	22
	20	10	12	13	15	16	18	20	21	23
	30	15	17	20	22	25	27	30	32	35
	40	20	23	26	30	33	36	39	43	46
	60	30	35	39	44	49	54	59	64	69
	63	31	36	41	47	52	57	62	67	72
	90	44	52	59	67	74	81	89	96	1·04
	93	46	54	61	69	76	84	92	99	1·07
	100	49	58	66	74	82	90	99	1·07	1·15
	200	99	1·15	1·32	1·48	1·64	1·81	1·97	2·14	2·30
	300	1·48	1·73	1·97	2·22	2·47	2·71	2·96	3·21	3·45
Months.	1	15	18	20	23	25	28	30	33	35
	2	30	35	40	45	50	55	60	65	70
	3	45	53	60	68	75	83	90	98	1·05
	4	60	70	80	90	1·00	1·10	1·20	1·30	1·40
	5	75	88	1·00	1·13	1·25	1·38	1·50	1·63	1·75
	6	90	1·05	1·20	1·35	1·50	1·65	1·80	1·95	2·10
	7	1·05	1·23	1·40	1·58	1·75	1·93	2·10	2·28	2·45
	8	1·20	1·40	1·60	1·80	2·00	2·20	2·40	2·60	2·80
	9	1·35	1·58	1·80	2·03	2·25	2·48	2·70	2·93	3·15
	10	1·50	1·75	2·00	2·25	2·50	2·75	3·00	3·25	3·50
	11	1·65	1·93	2·20	2·48	2·75	3·03	3·30	3·58	3·85
	12	1·80	2·10	2·40	2·70	3·00	3·30	3·60	3·90	4·20

	$75	$80	$85	$90	$95	$100	$200	$300	$400
Days. 1	1	1	1	1	2	2	3	5	7
2	2	3	3	3	3	3	7	10	13
3	4	4	4	4	5	5	10	15	20
4	5	5	6	6	6	7	13	20	26
5	6	7	7	7	8	8	16	25	33
6	7	8	8	9	9	10	20	30	39
7	9	9	10	10	11	12	23	35	46
8	10	11	11	12	12	13	26	39	53
9	11	12	13	13	14	15	30	44	59
10	12	13	14	15	16	16	33	49	66
11	14	14	15	16	17	18	36	54	72
12	15	16	17	18	19	20	39	59	79
13	16	17	18	19	20	21	43	64	85
14	17	18	20	21	22	23	46	69	92
15	18	20	21	22	23	25	49	74	99
16	20	21	22	24	25	26	53	79	1·05
17	21	22	24	25	27	28	56	84	1·12
18	22	24	25	27	28	30	59	89	1·18
19	23	25	27	28	30	31	62	94	1·25
20	25	26	28	30	31	33	66	99	1·32
30	37	39	42	44	47	49	99	1·48	1·97
40	49	53	56	59	62	66	1·32	1·97	2·63
60	74	79	84	89	94	99	1·97	2·96	3·95
63	78	83	88	93	98	1·04	2·07	3·11	4·14
90	1·11	1·18	1·26	1 33	1·41	1·48	2·96	4·44	5·92
93	1·15	1·22	1·30	1·38	1·45	1·53	3·06	4·59	6·12
100	1·23	1·32	1·40	1·48	1·56	1·64	3·29	4·93	6·58
200	2·47	2·63	2·79	2·96	3·12	3·29	6·58	9·86	13·15
300	3·70	3·95	4·19	4·44	4·68	4·93	9·86	14.79	19·73
Months. 1	38	40	43	45	48	50	1·00	1·50	2·00
2	75	80	85	90	95	1·00	2·00	3·00	4·00
3	1·13	1·20	1·28	1·35	1·43	1·50	3·00	4·50	6·00
4	1·50	1·60	1·70	1·80	1·90	2·00	4·00	6·00	8·00
5	1·88	2·00	2·13	2·25	2·38	2.50	5·00	7·50	10·00
6	2·25	2·40	2·55	2·70	2·85	3·00	6·00	9·00	12·00
7	2·63	2·80	2·98	3·15	3·33	3·50	7·00	10·50	14·00
8	3·00	3·20	3·40	3·60	3·80	4·00	8·00	12·00	16·00
9	3 38	3·60	3·83	4·05	4·28	4·50	9·00	13·50	18·00
10	3·75	4·00	4·25	4·50	4·75	5·00	10·00	15·00	20·00
11	4 13	4·40	4·68	4·95	5·23	5·50	11·00	16·50	22·00
12	4·50	4·80	5·10	5·40	5·70	6·00	12·00	18·00	24·00

A BOOK FOR THE MILLION.

FISHER'S
GRAIN
TABLES

The book contains 200 pages (same size as the Log Book), has over 20,000 different calculations of

GRAIN,

Computed at 60 Pounds to the Bushel,

SHOWING THE PRICE PER BUSHEL AND POUND FROM 10 CENTS TO $2.00.

Also, Tables Showing How Many Bushels of Different Kinds of Grain (weighing 32, 48, 56, 60 and 62 lbs. per Bushel) there is in a Given Number of Pounds, from 32 lbs. to 6,000 lbs,—together with a

COMPLETE READY RECKONER,

SHOWING HOW MUCH ANY NUMBER OF ARTICLES, POUNDS, BUSHELS OR YARDS WILL COME TO, FROM ¼ OF A CENT AND UPWARDS.

This part of the book will be found very useful for Small Traders and those unaccustomed to casting up figures. Also,

HAY TABLES,

SHOWING HOW MUCH 100 POUNDS OR MORE OF HAY WILL COME TO FROM $4.00 TO $20.00 PER TON. HAY RULE FOR FINDING PRICE PER TON. TABLES FOR FINDING THE NUMBER OF BUSHELS OF GRAIN IN BOXES AND BINS, QUANTITY OF HAY IN A STACK OR MOW. TABLES GIVING THE NUMBER OF POUNDS OF DIFFERENT KINDS OF GRAIN IN A BUSHEL IN DIFFERENT STATES.

ALSO,

Tables of

INTEREST, WAGES, RENT AND BOARD,

BY THE DAY, WEEK AND MONTH.

Cost of Raising Pork, Feeding Stock, Plowing Tables, Wheat, Flour and Meal Table, Nutriment of Food, Cost of Various Kinds of Fences, Capacity of Cisterns, Shrinkage of Grain, Comparison of Green and Dry Wood, Accurate Wood Measure, Strength of Ropes, Directions about Painting, Brief Maxims on Business and Law, Besides a Large Number of Miscellaneons Tables and Useful Mattter.

Just The Book Wanted by the

FARMER, MILLER AND GRAIN DEALER,

AND WILL SAVE TIME AND MANY MISTAKES BY HASTY CALCULATIONS IN FIGURES.

No book of a similar character contains so much valuable information in so compact a form as this. An examination will satisfy any one of its value.

PRICE, - - 40 CENTS.

ASK YOUR BOOKSELLER FOR IT.

Agents can make money selling the Book.— Sent post-paid for price by

GEO. W. FISHER, Publisher.

Rochester, N. Y., P. O. Box 238.

(Established 1854.)

CURTIS & CO.,

SAW

MANUFACTURERS.

Manufacturing the very best quality of Gang, Mulay, Mill and Drag Saws, Common, Champion and Hook Tooth Cross Cut Saws, Felloe, Turning, and Mill Web Saws, Fay's Scroll Saws, Solid Circular Saws of all sizes, Shingle, Edgar, Concave and Top Saws. Sole manufacturers of the celebrated Lockwood Patent Slotted Circular Saws, all made of best English Steel and fully warranted.

Wholesale dealers in French Band Saws, Nicholson & Butcher's Files, Mandrels, Emery Wheels, Saw Gummers, Rubber and Leather Belting, Upsets, Hemp Packing, Lace Leather, Cut Lacings, Lard and Lubricating Oils, Babbit Metal, and all other Mill Supplies.

Send for Price List and Discounts.

CURTIS & CO.,
811 and 813 North Second St.,
ST. LOUIS, MO.
—AND—
40 Franklin Street, Chicago, Illinois.

Digitized by:

INTERNATIONAL

ASSOCIATION
FOR
PRESERVATION
TECHNOLOGY,
INTERNATIONAL
www.apti.org

**BUILDING
TECHNOLOGY
HERITAGE
LIBRARY**

https://archive.org/details/buildingtechnologyheritagelibrary

From the collection of:

**NATIONAL
BUILDING
ARTS
CENTER**

http://web.nationalbuildingarts.org